BOBBY JINDAL
GOVERNOR

HAROLD LEGGETT, PH.D.
SECRETARY

State of Louisiana

DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL SERVICES
JUL 15 2008

CERTIFIED MAIL# 7008 0150 0003 4519 9174
RETURN RECEIPT REQUESTED

FILE NUMBER: LA0038822
AI NUMBER: 51970
ACTIVITY NUMBER: PER20060001

City of Grambling
Grambling Regional Wastewater Treatment Plant
P.O. Box 108
Grambling, LA 71245

Attention: Ms. Martha Andrus

Subject: Draft Louisiana Pollutant Discharge Elimination System (LPDES) permit to discharge treated sanitary wastewater into Redwine Creek, thence into Dugdemona River, thence into Big Creek, from a publicly owned treatment works serving the City of Grambling and Grambling State University.

Dear Mr. Papadopoulos:

The Department of Environmental Quality proposes to reissue an LPDES permit with the effluent limitations, monitoring requirements, and special conditions listed in the attached DRAFT PERMIT. Please note that this is a DRAFT PERMIT only and as such does not grant any authorization to discharge. Authorization to discharge in accordance with this permitting action will only be granted after all requirements described herein are satisfied and by the subsequent issuance of a FINAL PERMIT. Upon issuance, the LPDES permit shall replace the previously issued LPDES permit.

This Office will publish a public notice one time in the local newspaper of general circulation, and in the Department of Environmental Quality Public Notice Mailing List. A copy of the public notice containing the specific requirements for commenting to this draft permit action will be sent under separate cover at the time the public notice is arranged. In accordance with LAC 33:IX.6521.A, the applicant shall receive and is responsible for paying the invoice(s) from the newspaper(s). LAC 33:IX.6521 states, "...The costs of publication shall be borne by the applicant."

The invoice, fee rating worksheet, and a copy of the fee regulations will be sent under a separate cover letter as applicable. Please note that a copy of the fee rating worksheet is also attached to this draft permit. We must receive your fee payment by check, money order, or draft accompanied by the original and a copy of your invoice. A copy of the entire Louisiana Water Quality Regulations (Volume 14) may be obtained from the LDEQ Office of Environmental Assessment, Post Office Box 4314, Baton Rouge, Louisiana 70821-4314, (225) 219-3236.

Pursuant to LAC 33.IX.1309.I, LAC 33.IX.6509.A.1 and LAC 33.I.1701, you must pay any outstanding

fees to the Department. Therefore, you are encouraged to verify your facility's fee status by contacting LDEQ's Office of Management and Finance, Financial Services Division at (225) 219-3863. Failure to pay in the manner and time prescribed could result in applicable enforcement actions as prescribed in the Environmental Quality Act, including, but not limited to revocation or suspension of the applicable permit, and/or assessment of a civil penalty against you.

A Municipal Water Pollution Prevention Environmental Audit Report Form will be furnished upon finalization of the permit. Please consult Part II, Section B of the permit for instructions regarding this audit.

For sanitary treatment plants, the plans and specifications must be approved by the Department of Health and Hospitals, Office of Public Health, P.O. Box 4489, Baton Rouge, Louisiana 70821-4489, (225) 342-7395.

Should you have any questions concerning any part of the DRAFT PERMIT, public notice requirements, or fees, please contact Ms. Rachel Owens, Office of Environmental Services, Water Permits Division, Municipal and General Water Permits Section at the address on the preceding page or telephone (225) 219-3081. Please reference your Agency Interest Number 51970 and your Louisiana Pollutant Discharge Elimination System Number 0038822 on all future correspondence to the Department.

Sincerely,

Tom Killeen, Environmental Scientist Manager
Municipal and General Water Permits Section

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Attachments (Draft Permit Parts I-III, Statement of Basis, and Fee Sheet)

ec: Ms. Gayle Denino
Office of Management & Finance

Permit Compliance Unit
Office of Environmental Compliance

For Public Notice
Public Participation Group
Office of Environmental Assistance

Public Health Chief Engineer
Office of Public Health
Department of Health and Hospitals

cc: IO-W
Rachel Owens
Water Permits Division

DRAFT

PERMIT NUMBER: LA0038822
AGENCY INTEREST NO.: 51970
ACTIVITY NO.: PER20060001

DEQ
LOUISIANA

OFFICE OF ENVIRONMENTAL SERVICES

Water Discharge Permit

Pursuant to the Clean Water Act, as amended (33 U.S.C. 1251 et seq.), and the Louisiana Environmental Quality Act, as amended (La. R. S. 30:2001 et seq.), rules and regulations effective or promulgated under the authority of said Acts, and in reliance on statements and representations heretofore made in the application, a Louisiana Pollutant Discharge Elimination System permit is issued authorizing

City of Grambling
Grambling Regional Wastewater Treatment Plant
P.O. Box 108
Grambling, LA 71245

Type Facility: publicly owned treatment works serving the City of Grambling and Grambling State University

Location: 7706 U.S. Highway 80 West in Grambling, Lincoln Parish

Receiving Waters: Redwine Creek, thence into Dugdemona River, thence into Big Creek (Subsegment 081401)

to discharge in accordance with effluent limitations, monitoring requirements, and other conditions set forth in Parts I, II, and III attached hereto.

This permit shall become effective on

This permit and the authorization to discharge shall expire five (5) years from the effective date of the permit.

Issued on

Cheryl Sonnier Nolan
Assistant Secretary

DRAFT

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

INTERIM EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning from the effective date of the permit lasting through three years from the effective date of the permit the permittee is authorized to discharge from:

Outfall 001, treated sanitary wastewater (**design capacity** is 1.5 MGD).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic		Discharge Limitations (lbs/day)		Discharge Limitations other units (specify)		Monitoring Requirements	
	Storet Code	Monthly Avg.	Weekly Avg.	Monthly Avg.	Weekly Avg.	Measurement Frequency	Sample Type
Flow-MGD	50050	Report	Report	---	---	Continuous	Recorder[1]
$CBOD_5$	80082						
May- October		125	---	10 mg/l	15 mg/l	2/week	6 Hr. Composite
November- April		250	---	20 mg/l	30 mg/l	2/week	6 Hr. Composite
TSS	00530						
May-October		188	---	15 mg/l	23 mg/l	2/week	6 Hr. Composite
November-April		250	---	20 mg/l	30 mg/l	2/week	6 Hr. Composite
Total Residual Chlorine (TRC)[2]	50060	---	---	---	---	2/week	Grab
Ammonia-Nitrogen	00610						
May-October		25	---	2 mg/l	4 mg/l	2/week	6 Hr. Composite
November-April		50	---	4 mg/l	8 mg/l	2/week	6 Hr. Composite
Dissolved Oxygen[3]	00300	---	---	5 mg/l	N/A	2/week	Grab
Fecal Coliform colonies/100ml [2]	74055	---	---	200	400	2/week	Grab
pH (Standard Units)[4]	00400	---	---	---	---	2/week	Grab

	Storet Code	(lbs/day) Monthly Avg.	(lbs/day) Daily Max	Measuring Frequency	Sample Type
Total Copper[5]	01042	Report	Report	1/quarter	24 Hr. Composite

Biomonitoring[6]	Storet Code	Monthly Avg Minimum	7- Day Minimum	Measurement Frequency	Sample Type
Ceriodaphnia dubia	TLP3B	Report[7]	Report[7]	1/quarter	24-Hr Composite
	TOP3B	Report	Report	1/quarter	24-Hr Composite
	TPP3B	Report	Report	1/quarter	24-Hr Composite
	TGP3B	Report[7]	Report[7]	1/quarter	24-Hr Composite
	TQP3B	Report	Report	1/quarter	24-Hr Composite
Pimephales promelas	TLP6C	Report[7]	Report[7]	1/quarter	24-Hr Composite
	TOP6C	Report	Report	1/quarter	24-Hr Composite
	TPP6C	Report	Report	1/quarter	24-Hr Composite
	TGP6C	Report[7]	Report[7]	1/quarter	24-Hr Composite
	TQP6C	Report	Report	1/quarter	24-Hr Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

INTERIM EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

If a test failure has occurred and the required retests have been performed, the test results are to be reported on the DMR as follows:

Biomonitoring[6]	Storet Code	Monthly Avg. Minimum	48-Hour Minimum	Measurement Frequency	Sample Type
Retest #1	22415	Report[7]	Report[7]	As Required[8]	24-Hr Composite
	22418	Report[7]	Report[7]	As Required[8]	24-Hr Composite
Retest #2	22416	Report[7]	Report[7]	As Required[8]	24-Hr Composite
	22419	Report[7]	Report[7]	As Required[8]	24-Hr Composite
Retest #3	51443	Report[7]	Report[7]	As Required[8]	24-Hr Composite
	51444	Report[7]	Report[7]	As Required[8]	24-Hr Composite

1 Includes totalizing meter or totalizer.

2 See Part II, Section A, Paragraph 9

Prior to final disposal, the effluent shall contain NO MEASURABLE Total Residual Chlorine at any one time monitored by grab sample. Given the current constraints pertaining to chlorine analytical methods, NO MEASURABLE will be defined as less than 0.1 mg/l of chlorine. If any individual analytical test result is less than 0.1 mg/l, a value of zero (0) may be used for that individual result for the Discharge Monitoring Report (DMR) calculations and reporting requirements.

3 This Dissolved Oxygen limit is the lowest allowable average of daily discharges over a calendar month. When monitoring is conducted, the Dissolved Oxygen shall be analyzed immediately, as per 40 CFR 136.3.

4 The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units. The permittee shall report on the Discharge Monitoring Reports both the minimum and maximum instantaneous pH values measured.

5 If any individual analytical test result is less than the minimum quantification level listed below, a value of zero (0) may be used for that individual result for the Discharge Monitoring Report (DMR) mass calculations and reporting requirements for the pollutants listed below:

Pollutant	MQL
Copper	10 µg/L

6 See Part II, Whole Effluent Toxicity Testing Requirements.

7 Species Quality Reporting Units: Pass = 0, Fail = 1

8 Monthly Testing Required only if routine test for reporting period (for either species) fails.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location:

Outfall 001, at the point of discharge from the last treatment unit prior to mixing with other waters.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning three years from the effective date lasting through the expiration of the permit the permittee is authorized to discharge from:

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Flow-MGD	50050	Report	Report	---	---	Continuous	Recorder[1]
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pH (Standard Units)[4]	00400	---	---	---	---	2/week	Grab

	Storet Code	(lbs/day) Monthly Avg.	(lbs/day) Daily Max	Measuring Frequency	Sample Type
Total Copper[5]	01042	0.078	0.186	1/quarter	24 Hr. Composite

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	TPP3B	Report	Report	1/quarter	24-Hr Composite
	TGP3B	Report[7]	Report[7]	1/quarter	24-Hr Composite
	TQP3B	Report	Report	1/quarter	24-Hr Composite
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	TOP6C	Report	Report	1/quarter	24-Hr Composite
	TPP6C	Report	Report	1/quarter	24-Hr Composite
	TGP6C	Report[7]	Report[7]	1/quarter	24-Hr Composite
	TQP6C	Report	Report	1/quarter	24-Hr Composite

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

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	22419	Report[7]	Report[7]	As Required[8]	24-Hr Composite
Retest #3	51443	Report[7]	Report[7]	As Required[8]	24-Hr Composite
	51444	Report[7]	Report[7]	As Required[8]	24-Hr Composite

1. Includes totalizing meter or totalizer.

2 See Part II, Section A, Paragraph 9

Prior to final disposal, the effluent shall contain NO MEASURABLE Total Residual Chlorine at any one time monitored by grab sample. Given the current constraints pertaining to chlorine analytical methods, NO MEASURABLE will be defined as less than 0.1 mg/l of chlorine. If any individual analytical test result is less than 0.1 mg/l, a value of zero (0) may be used for that individual result for the Discharge Monitoring Report (DMR) calculations and reporting requirements.

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Pollutant	MQL
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Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location:

Outfall 001, at the point of discharge from the last treatment unit prior to mixing with other waters.

PART II

OTHER REQUIREMENTS

In addition to the standard conditions required in all permits and listed in Part III, the office has established the following additional requirements in accordance with the Louisiana Water Quality Regulations.

SECTION A. GENERAL STATEMENTS

1. In accordance with LAC 33:IX.2707.C, this permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(c) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act, if the effluent standard or limitations so issued or approved:

   a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or

   b) Controls any pollutant not limited in the permit; or

   c) Requires reassessment due to change in 303(d) status of waterbody; or

   d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body.

   LDEQ reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future. Additional limitations and/or restrictions are based upon water quality studies and can indicate the need for advanced wastewater treatment. Water quality studies of similar dischargers and receiving water bodies have resulted in monthly average effluent limitations of 5mg/L $CBOD_5$ and 2 mg/L NH_3-N. Prior to upgrading or expanding this facility, the permittee should contact LDEQ to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

2. This permit does not in any way authorize the permittee to discharge a pollutant not listed or quantified in the application or limited or monitored for in the permit.

3. Authorization to discharge pursuant to the conditions of this permit does not relieve the permittee of any liability for damages to state waters or private property. For discharges to private land, this permit does not relieve the permittee from obtaining proper approval from the landowner for appropriate easements and rights of way.

4. For definitions of monitoring and sampling terminology see Part III, Section F.

5. 24-hour Oral Reporting: Daily Maximum Limitation Violations

   Under the provisions of Part III Section D.6.e.(3) of this permit, violations of daily maximum limitations for the following pollutants shall be reported orally to the Office of Environmental Compliance within 24 hours from the time the permittee became aware of the violation followed by a written report in five days.

   Pollutants: Total Copper

6. As an exception to Part III Section D.6.e.(1), the permittee shall report all overflows in the collection system with the Discharge Monitoring Report submittal. These reports shall be summarized and reported in tabular format. The summaries shall include: the date, time, duration, location, estimated volume, and cause of the overflow; observed environmental impacts from the overflow; actions taken to address the overflow; and the ultimate discharge location if not contained (e.g., storm sewer system, ditch, tributary). All other overflows and overflows which endanger human health or the environment must be reported in the manner described in Part III, Section D.6 of the permit.

OTHER REQUIREMENTS (cont.)

7. CONSTRUCTION COMPLIANCE SCHEDULE

The permittee shall efficiently operate and maintain the existing treatment facility so as to discharge effluent which does not exceed the INTERIM EFFLUENT LIMITATIONS and MONITORING REQUIREMENTS.

The permittee shall achieve compliance with the FINAL EFFLUENT LIMITATIONS and MONITORING REQUIREMENTS specified in accordance with the following schedule:

ACTIVITY	EFFECTIVE DATE
Achieve Interim Effluent Limitations and Monitoring Requirements	Effective date of the permit
Achieve Final Effluent Limitations and Monitoring Requirements	Three years from the effective date of the permit

The above listed activities must be achieved on or before the deadline date. Additionally, the Permittee shall submit a progress report outlining the status of all facility improvements on a yearly basis (from the effective date of the permit) until compliance is achieved.

Within 14 days of completion of the new facility or facility upgrade and/or expansion, the Permittee shall notify the Department of Environmental Quality - Office of Environmental Compliance, in writing, that construction has been completed.

The Permittee shall achieve sustained compliance with Final Effluent Limitations.

Where the percent project completion reported is less than would be required to assure completion of construction by the required date, the report of progress shall also include an explanation for this delay and proposed remedial actions.

No later than 14 calendar days following a date for a specific action (as opposed to a report of progress) identified in the above schedule of compliance, the permittee shall submit a written notice of compliance or noncompliance.

8. DISCHARGE MONITORING REPORTS

Monitoring results must be reported on a Discharge Monitoring Report (DMR) form (EPA No. 3320-1 or an approved substitute). All monitoring reports must be retained for a period of at least three (3) years from the date of the sample measurement. The permittee shall make available to this Department, upon request, copies of all monitoring data required by this permit.

If there is a no discharge event at any of the monitored outfall(s) during the reporting period, enter "No Discharge" in the upper right corner of the Discharge Monitoring Report.

Reporting periods shall end on the last day of the month. Monitoring results for each month shall be summarized on a Discharge Monitoring Report (DMR) Form and submitted to the Office of Environmental Compliance on a monthly basis, postmarked no later than the 15th day of the month following each reporting period.
Permittees shall be required to submit DMRs according to the following schedule or as established in the permit:

For parameter(s) with monitoring frequency(ies) of **1/month or more frequent**:

OTHER REQUIREMENTS (cont.)

Postmark DMR by the 15th day of the following month.

For parameter(s) with monitoring frequency (ies) of **1/quarter**:

Monitoring Period	DMR Postmark Date
January 1-March 31	April 15th
April 1-June 30	July 15th
July 1- September 30	October 15th
October 1 – December 31	January 15th

For parameter(s) with monitoring frequency (ies) of **semi-annual**:

Monitoring Period	DMR Postmark Date
January 1-June 30	July 15th
July 1- December 31	January 15th

For parameter(s) with monitoring frequency(ies) of **1/year**:

Monitoring Period	DMR Postmark Date
January 1- December 31	January 15th

Duplicate copies of DMRs (one set of originals and one set of copies) signed and certified as required by LAC 33:IX.2503.B, and all other reports (one set of originals) required by this permit shall be submitted to the Permit Compliance Unit at the following address:

Department of Environmental Quality
Office of Environmental Compliance
Enforcement Division
Post Office Box 4312
Baton Rouge, Louisiana 70821-4312
Attention: Permit Compliance Unit

In addition, enforcement authority has been retained by EPA. Therefore, the original and a copy of the DMRs must also be submitted to the following address until notification that enforcement authority has been assumed by LDEQ:

U.S. Environmental Protection Agency, Region 6
Water Enforcement Branch, 6 EN-WC
1445 Ross Ave
Dallas, Texas 75202

9. Please be aware, concentrations of Total Residual Chlorine above 0.01 mg/l can cause or contribute to significant toxicity in receiving streams and biomonitoring testing. It is the permittee's responsibility to assure that no Total Residual Chlorine remains in the effluent after dechlorination in order to prevent toxicity in the receiving stream and in whole effluent toxicity testing.

OTHER REQUIREMENTS (cont.)

10. The acceptance of hauled domestic septage is prohibited unless otherwise authorized by this Department. Septage is defined in LAC 33:IX.2313 as the liquid and solid material pumped from a septic tank, cesspool, portable toilet, Type III marine sanitation device, any similar domestic sewage treatment system, or a holding tank when the system is cleaned or maintained that receives only domestic sewage.

OTHER REQUIREMENTS (cont.)

SECTION B. MUNICIPAL WATER POLLUTION PREVENTION

Pollution Prevention Requirements

1. The permittee shall institute or continue programs directed towards pollution prevention. The permittee shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility. The permittee will complete an annual Environmental Audit Report **each year** for the life of this permit according to the schedule below. A copy of the Environmental Audit Form has been attached to this permit. Please make additional copies to be utilized for each year of this permit. Additional copies can be obtained upon request.

The audit evaluation period is as follows:

Audit Period Begins	Audit Period Ends	Audit Report Completion Date
Effective Date of Permit	12 Months from Audit Period Beginning Date	3 Months from Audit Period Ending Date

These reports shall discuss the following items:

a. The influent loading, flow, and design capacity of the facility;

b. The effluent quality and plant performance;

c. The age of the wastewater treatment facility;

d. Bypasses and overflows of the tributary sewerage system and treatment works;

e. The ultimate disposition of the sewage sludge;

f. Landfilling of sewage sludge and potential alternatives (if applicable);

g. New developments at the facility;

h. Operator certification and training;

i. The financial status of the facility; and

j. A subjective evaluation of conditions at the facility.

OTHER REQUIREMENTS (cont.)

2. A resolution from the permittee's governing body shall be obtained as part of the Environmental Audit Report. This resolution shall include, at a minimum, the following:

a. An acknowledgement that the governing body has reviewed the Environmental Audit Report;

b. A description of actions that the permittee will take to maintain compliance with the permit conditions, and if necessary, include a schedule outlining major projects to be accomplished.

3. The Environmental Audit Report and the governing body's resolution must be signed by a duly authorized representative of the permittee and shall be maintained with the permit and permit related records (i.e. lab data, DMRs), and made available upon request by duly authorized regional inspectors and/or DEQ Headquarters representatives.

OTHER REQUIREMENTS (cont.)

SECTION C. CONTRIBUTING INDUSTRIES AND PRETREATMENT REQUIREMENTS

1. The following pollutants may not be introduced into the treatment facility:

   a. Pollutants which create a fire or explosion hazard in the publicly owned treatment works (POTW), including, but not limited to, wastestreams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 CFR 261.21;

   b. Pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with pH lower than 5.0, unless the works are specifically designed to accommodate such discharges;

   c. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW, resulting in Interference;

   d. Any pollutant, including oxygen demanding pollutants (e.g., BOD5), released in a discharge at a flow rate and/or pollutant concentration which will cause Interference with the POTW;

   e. Heat in amounts which will inhibit biological activity in the POTW resulting in Interference but in no case heat in such quantities that the temperature at the POTW treatment plant exceeds 40 degrees Centigrade (104 degrees Fahrenheit) unless the Approval Authority, upon request of the POTW, approves alternate temperature limits;

   f. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;

   g. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems; and

   h. Any trucked or hauled pollutants, except at discharge points designated by the POTW.

2. The permittee shall require any indirect discharger to the treatment works to comply with the reporting requirements of Sections 204(b), 307, and 308 of the Clean Water Act, including any requirements established under LAC 33:IX.Subpart 2.Chapter 61.

3. The permittee shall provide adequate notice of the following:

   a. Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Sections 301 and 306 of the Clean Water Act if it were directly discharging those pollutants; and
   b. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of the permit.
   c. Any notice shall include information on (1) the quality and quantity of effluent to be introduced into the treatment works, and (2) any anticipated impact of the change on the quality or quantity of effluent to be discharged from the POTW.

OTHER REQUIREMENTS (cont.)

SECTION D. STORMWATER DISCHARGES

1. This section applies to all stormwater discharges from the facility, either through permitted outfalls or through outfalls which are not listed in the permit or as sheet flow.

2. Any runoff leaving the developed areas of the facility, other than the permitted outfall(s), exceeding 50 mg/L TOC, 15 mg/L Oil and Grease, or having a pH less than 6.0 or greater than 9.0 standard units shall be a violation of this permit. Any discharge in excess of these limitations, which is attributable to offsite contamination, shall not be considered a violation of this permit. A visual inspection of the facility shall be conducted and a report made annually as described in Paragraph 4 below.

3. The permittee shall prepare, implement, and maintain a Storm Water Pollution Prevention Plan (SWP3) within six (6) months of the effective date of the final permit. The terms and conditions of the SWP3 shall be an enforceable Part of the permit. EPA document 833-R-92-002 (Storm Water Management for Industrial Activities) may be used as a guidance and may be obtained by writing to the U.S. Environmental Protection Agency, Office of Water Resources (RC-4100), 401 M Street, S.W., Washington D.C. 20460 or by calling (202) 260-7786.

4. The following conditions are applicable to all facilities and shall be included in the SWP3 for the facility.

   a. The permittee shall conduct an annual inspection of the facility site to identify areas contributing to the storm water discharge from developed areas of the facility and evaluate whether measures to reduce pollutant loadings identified in the SWP3 are adequate and have been properly implemented in accordance with the terms of the permit or whether additional control measures are needed.

   b. The permittee shall develop a site map that includes all areas where stormwater may contact potential pollutants or substances that can cause pollution. Any location where reportable quantities leaks or spills have previously occurred are to be documented in the SWP3. The SWP3 shall contain a description of the potential pollutant sources, including, the type and quantity of material present and what action has been taken to assure stormwater precipitation will not directly contact the substances and result in contaminated runoff.

   c. Where experience indicates a reasonable potential for equipment failure (e.g. a tank overflow or leakage), natural condition of (e.g. precipitation), or other circumstances which result in significant amounts of pollutants reaching surface waters, the SWP3 should include a prediction of the direction, rate of flow and total quantity of pollutants which could be discharged from the facility as a result of each condition or circumstance.

   d. The permittee shall maintain for a period of three years a record summarizing the results of the inspection and a certification that the facility is in compliance with the SWP3 and the permit, and identifying any incidents of noncompliance. The summary report should contain, at a minimum, the date and time of inspection, name of inspector(s), conditions found, and changes to be made to the SWP3.

   e. The summary report and the following certification shall be signed in accordance with LAC 33:IX.2503. The summary report is to be attached to the SWP3 and provided to the Department upon request.

      "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are

OTHER REQUIREMENTS (cont.)

significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Signatory requirements for the certification may be found in Part III, Section D.10 of this permit.

f. The permittee shall make available to the Department, upon request, a copy of the SWP3 and any supporting documentation.

5. The following shall be included in the SWP3, if applicable.

a. The permittee shall utilize all reasonable methods to minimize any adverse impact on the drainage system including but not limited to:
   i. maintaining adequate roads and driveway surfaces;
   ii. removing debris and accumulated solids from the drainage system; and
   iii. cleaning up immediately any spill by sweeping, absorbent pads, or other appropriate methods.

b. All spilled product and other spilled wastes shall be immediately cleaned up and disposed of according to all applicable regulations, Spill Prevention and Control (SPC) plans or Spill Prevention Control and Countermeasures (SPCC) plans. Use of detergents, emulsifiers, or dispersants to clean up spilled product is prohibited except where necessary to comply with State or Federal safety regulations (i.e., requirement for non-slippery work surface). In all such cases, initial cleanup shall be done by physical removal and chemical usage shall be minimized.

c. All equipment, parts, dumpsters, trash bins, petroleum products, chemical solvents, detergents, or other materials exposed to stormwater shall be maintained in a manner which prevents contamination of stormwater by pollutants.

d. All waste fuel, lubricants, coolants, solvents, or other fluids used in the repair or maintenance of vehicles or equipment shall be recycled or contained for proper disposal. Spills of these materials are to be cleaned up by dry means whenever possible.

e. All storage tank installations (with a capacity greater than 660 gallons for an individual container, or 1,320 gallons for two or more containers in aggregate within a common storage area) shall be constructed so that a secondary means of containment is provided for the entire contents of the largest tank plus sufficient freeboard to allow for precipitation. Diked areas should be sufficiently impervious to contain spills.

f. All diked areas surrounding storage tanks or stormwater collection basins shall be free of residual oil or other contaminants so as to prevent the accidental discharge of these materials in the event of flooding, dike failure, or improper draining of the diked area. All drains from diked areas shall be equipped with valves that shall be kept in the closed condition except during periods of supervised discharge.

g. All check valves, tanks, drains, or other potential sources of pollutant releases shall be inspected and maintained on a regular basis to assure their proper operation and to prevent the discharge of pollutants.

h. The permittee shall assure compliance with all applicable regulations promulgated under the Louisiana Solid Waste and Resource Recovery Law and the Hazardous Waste Management Law (L.R.S. 30:2151, etc.). Management practices required under above regulations shall be referenced in the SWP3.

i. The permittee shall amend the SWP3 whenever there is a change in the facility or change in the operation of the facility that materially increases the potential for the ancillary activities to result in a discharge of significant amounts of pollutants.

OTHER REQUIREMENTS (cont.)

j. If the SWP3 proves to be ineffective in achieving the general objectives of preventing the release of significant amounts of pollutants to water of the state, then the specific objectives and requirements of the SWP3 shall be subject to modification to incorporate revised SWP3 requirements.

6. Facility Specific SWP3 Conditions:

a. **Site Map.** The locations of the following areas, where such areas are exposed to precipitation, shall also be included on the site map: grit, screenings and other solids handling, storage or disposal areas; sludge drying beds; dried sludge piles; compost piles; septage and/or hauled waste receiving station; and storage areas for process chemicals, petroleum products, solvents, fertilizers, herbicides and pesticides.

b. **Employee Training.** At a minimum, must address the following areas when applicable to a facility: petroleum product management; process chemical management; spill prevention and controls; fueling procedures; general good housekeeping practices; proper procedures for using fertilizer, herbicides and pesticides.

c. **Potential Pollutant Sources.** The summary of potential pollutant sources must also list the activities and pollutants from the following areas: grit, screenings and other solids handling, storage or disposal areas; sludge drying beds; dried sludge piles; compost piles; septage and/or hauled waste receiving station; and access roads/rail lines.

d. **Description of BMPs to be Used.** In addition to the other BMPs considered, the facility must consider routing storm water into treatment works, or covering exposed materials from the following exposed areas: grit, screenings and other solids handling, storage or disposal areas; sludge drying beds; dried sludge piles; compost piles; septage and/or hauled waste receiving station.

e. ***Inspections:*** *The following areas must be included in all monthly inspections:* access roads/rail lines; grit, screenings and other solids handling, storage or disposal areas; sludge drying beds, dried sludge piles; compost piles; septage and/or hauled waste receiving station areas.

f. **Wastewater and Washwater Requirements.** If washwaters are handled in another manner other than the treatment works, the disposal method must be described and all pertinent documentation must be attached to the plan.

OTHER REQUIREMENTS (cont.)

SECTION E. WHOLE EFFLUENT TOXICITY TESTING (7-DAY CHRONIC NOEC: FRESHWATER)

1. SCOPE AND METHODOLOGY

It is unlawful and a violation of this permit for a permittee or the designated agent, to manipulate test samples in any manner, to delay sample shipment, or to terminate or to cause to terminate a toxicity test. Once initiated, all toxicity tests must be completed unless specific authority has been granted by the Louisiana Department of Environmental Quality.

a. The permittee shall test the effluent for toxicity in accordance with the provisions in this section.

APPLICABLE TO OUTFALL(S):	**001**
REPORTED ON DMR AS OUTFALL:	**TX1**
CRITICAL DILUTION:	**96%**
EFFLUENT DILUTION SERIES:	**30%, 40%, 54%, 72%, and 96%**
COMPOSITE SAMPLE TYPE:	**Defined at PART I**
TEST SPECIES/METHODS:	**40 CFR Part 136**

Ceriodaphnia dubia chronic static renewal survival and reproduction test, Method 1002.0, EPA-821-R-02-013, or the most recent update thereof. This test should be terminated when 60% of the surviving females in the control produce three broods or at the end of eight days, whichever comes first.

Pimephales promelas (Fathead minnow) chronic static renewal 7-day larval survival and growth test; Method 1000.0, EPA-821-R-02-013, or the most recent update thereof. A minimum of five (5) replicates with ten (10) organisms per replicate must be used in the control and in each effluent dilution of this test.

b. The survival NOEC (No Observed Effect Concentration) is defined as the greatest effluent dilution at and below which lethality that is statistically different from the control (0% effluent) at the 95% confidence level does not occur. The NOEC for growth or reproduction is defined as the greatest effluent dilution at and below which sub-lethality that is statistically different from the control (0% effluent) at the 95% confidence level does not occur.

c. This permit may be reopened to require whole effluent toxicity limits, chemical specific effluent limits, additional testing, and/or other appropriate actions to address toxicity.

d. Lethal test failure is defined as a demonstration of a statistically significant lethal effect at test completion to a test species at or below the critical dilution. Sub-lethal test failure is defined as a demonstration of a statistically significant sub-lethal effect (i.e., growth or reproduction) at test completion to a test species at or below the critical dilution.

2. PERSISTENT LETHAL and/or SUB-LETHAL EFFECTS

The requirements of this section apply only when a toxicity test demonstrates significant lethal and/or sub-lethal effects at or below the critical dilution.

If any valid test demonstrates significant lethal or sub-lethal effects to a test species at or below the critical dilution, the frequency of testing for that species is automatically increased to once per quarter for the term of the permit.

OTHER REQUIREMENTS (cont.)

a. The permittee shall conduct a total of three (3) additional tests for any species that demonstrates statistically significant lethal or sub-lethal toxic effects at the critical dilution or lower effluent dilutions. The additional tests shall be conducted monthly during the next three consecutive months in which a discharge occurs to determine if toxicity is persistent or occurs on a periodic basis. The purpose of this testing is to determine whether toxicity is present at a level and frequency that will provide toxic sample results to use in performing a Toxicity Reduction Evaluation (TRE). If no additional test failures occur during the retest monitoring period, the testing frequency will be once per quarter for the term of the permit or until another test failure occurs. The permittee may substitute one of the additional tests in lieu of one routine toxicity test. A full report shall be prepared for each test required by this section in accordance with procedures outlined in item 4 of this section and submitted with the period discharge monitoring report (DMR) to the permitting authority for review.

b. IF LETHAL EFFECTS HAVE BEEN DEMONSTRATED: If any of the valid additional tests demonstrates significant lethal effects at or below the critical dilution, the permittee shall initiate Toxicity Reduction Evaluation (TRE) requirements as specified in item 6 of this section. The permittee shall notify the Department of Environmental Quality, Office of Environmental Compliance - Permit Compliance Unit in writing within 5 days of the failure of any retest, and the TRE initiation date will be the test completion date of the first failed retest. A TRE may also be required due to a demonstration of intermittent lethal effects at or below the critical dilution, or for failure to perform the required retests.

c. IF ONLY SUB-LETHAL EFFECTS HAVE BEEN DEMONSTRATED: If any two of the three valid additional tests demonstrate significant sub-lethal effects at 75% effluent dilution or lower, the permittee shall initiate the Toxicity Reduction Evaluation (TRE) requirements (emphasizing investigations pertaining to sub-lethal toxicity) as specified in Item 6 of this section. The permittee shall notify the Department of Environmental Quality, Office of Environmental Compliance - Permit Compliance Unit in writing within 5 days of the failure of any retest, and the TRE initiation date will be the test completion date of the first failed retest. A TRE concentrating on sub-lethal effects may also be required for failure to perform the required tests.

d. The provisions of item 2.a are suspended upon submittal of the **TRE Action Plan**.

3. **REQUIRED TOXICITY TESTING CONDITIONS**

a. Test Acceptance

The permittee shall repeat a test, including the control and all effluent dilutions, if the procedures and quality assurance requirements defined in the test methods or in this permit are not satisfied, including the following additional criteria:

i. The toxicity test control (0% effluent) must have survival equal to or greater than 80%.

ii. The mean number of Ceriodaphnia dubia neonates produced per surviving female in the control (0% effluent) must be 15 or more.

iii. 60% of the surviving control females must produce three broods.

iv. The mean dry weight of surviving Fathead minnow larvae at the end of the 7 days in the control (0% effluent) must be 0.25 mg per larva or greater.

v. The percent coefficient of variation between replicates shall be 40% or less in the control (0%

OTHER REQUIREMENTS (cont.)

effluent) for: the young of surviving females in the Ceriodaphnia dubia reproduction test; the growth and survival endpoints of the Fathead minnow test.

vi. The percent coefficient of variation between replicates shall be 40% or less in the critical dilution, unless significant lethal or nonlethal effects are exhibited for: the young of surviving females in the Ceriodaphnia dubia reproduction test; the growth and survival endpoints of the Fathead minnow test.

Test failure may not be construed or reported as invalid due to a coefficient of variation value of greater than 40%. A repeat test shall be conducted within the required reporting period of any test determined to be invalid.

b. Statistical Interpretation

i. For the Ceriodaphnia dubia survival test, the statistical analyses used to determine if there is a significant difference between the control and the critical dilution shall be Fisher's Exact Test as described in EPA-821-R-02-013, or the most recent update thereof.

If the conditions of Test Acceptability are met in Item 3.a above and the percent survival of the test organism is equal to or greater than 80% in the critical dilution and all lower dilution concentrations, the test shall be considered to be a passing test, and the permittee shall report a survival NOEC of not less than the critical dilution for the DMR reporting requirements found in Item 4 below.

ii. For the Ceriodaphnia dubia reproduction test and the Fathead minnow larval survival and growth test, the statistical analyses used to determine if there is a significant difference between the control and the critical dilution shall be in accordance with the methods for determining the No Observed Effect Concentration (NOEC) as described in EPA-821-R-02-013, or the most recent update thereof.

c. Dilution Water

i. Dilution water used in the toxicity tests will be receiving water collected as close to the point of discharge as possible but unaffected by the discharge. The permittee shall substitute synthetic dilution water of similar pH, hardness and alkalinity to the closest downstream perennial water for;

A. toxicity tests conducted on effluent discharges to receiving water classified as intermittent streams; and

B. toxicity tests conducted on effluent discharges where no receiving water is available due to zero flow conditions.

ii. If the receiving water is unsatisfactory as a result of instream toxicity (fails to fulfill the test acceptance criteria of item 3.a), the permittee may substitute synthetic dilution water for the receiving water in all subsequent tests provided the unacceptable receiving water test met the following stipulations:

A. a synthetic dilution water control which fulfills the test acceptance requirements of item 3.a was run concurrently with the receiving water control;

B. the test indicating receiving water toxicity has been carried out to completion (i.e., 7 days);

C. the permittee includes all test results indicating receiving water toxicity with the full report

OTHER REQUIREMENTS (cont.)

and information required by item 4 below; and

D. the synthetic dilution water shall have a pH, hardness and alkalinity similar to that of the receiving water or closest downstream perennial water not adversely affected by the discharge, provided the magnitude of these parameters will not cause toxicity in the synthetic dilution water.

d. Samples and Composites

i. The permittee shall collect a minimum of three flow-weighted 24-hour composite samples from the outfall(s) listed at item 1.a above. A 24-hour composite sample consists of a minimum of 4 effluent portions collected at equal time intervals representative of a 24-hour operating day and combined proportional to flow or a sample continuously collected proportional to flow over a 24-hour operating day.

ii. The permittee shall collect second and third 24-hour composite samples for use during 24-hour renewals of each dilution concentration for each test. The permittee must collect the 24-hour composite samples such that the effluent samples are representative of any periodic episode of chlorination, biocide usage or other potentially toxic substance discharged on an intermittent basis.

iii. The permittee must collect the 24-hour composite samples so that the maximum holding time for any effluent sample shall not exceed 72 hours. The permittee must have initiated the toxicity test within 36 hours after the collection of the last portion of the first 24-hour composite sample. Samples shall be chilled to 0-6 degrees Centigrade during collection, shipping and/or storage.

iv. If the flow from the outfall(s) being tested ceases during the collection of effluent samples, the requirements for the minimum number of effluent samples, the minimum number of effluent portions and the sample holding time are waived during that sampling period. However, the permittee must collect an effluent composite sample volume during the period of discharge that is sufficient to complete the required toxicity tests with daily renewal of effluent. When possible, the effluent samples used for the toxicity tests shall be collected on separate days if the discharge occurs over multiple days. The effluent composite sample collection duration and the static renewal protocol associated with the abbreviated sample collection must be documented in the full report required in item 4 of this section.

4. REPORTING

a. A valid test must be completed and test results must be submitted for each species during each Monitoring Period. The permittee shall prepare a full report of the results of all tests conducted pursuant to this section in accordance with the Report Preparation Section of EPA-821-R-02-013, or the most current publication, for every valid or invalid toxicity test initiated whether carried to completion or not. The permittee shall retain each full report pursuant to the provisions of Part III.C of this permit. For any test which fails, is considered invalid, or which is terminated early for any reason, the full report must be submitted for agency review. The permittee shall submit the first full report to the following address:

Department of Environmental Quality
Office of Environmental Compliance
P.O. Box 4312
Baton Rouge, Louisiana 70821-4312
Attn: Permit Compliance Unit

OTHER REQUIREMENTS (cont.)

In addition, if enforcement authority has been retained by EPA, a copy of the report must also be submitted to the following address:

U.S. Environmental Protection Agency, Region 6
Water Enforcement Branch, 6 EN-WC
1445 Ross Ave.
Dallas, Texas 75202

b. The permittee shall submit the results of each valid toxicity test on the DMR for that Monitoring Period in accordance with Part III. D.4 and the DMR Monitoring Period schedule contained in Part II of this permit. Submit retest information clearly marked as such on the DMR for the Monitoring Period in which the retest occurred. Only results of valid tests are to be reported on the DMR. The permittee shall submit the Table 1 Summary Sheet with each valid test.

i. Pimephales promelas (Fathead Minnow)

A. If the No Observed Effect Concentration (NOEC) for survival is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TLP6C.

B. Report the NOEC value for survival, Parameter No. TOP6C.

C. Report the NOEC value for growth, Parameter No. TPP6C.

D. If the No Observed Effect Concentration (NOEC) for growth is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TGP6C.

E. Report the highest (critical dilution or control) Coefficient of Variation, Parameter No. TQP6C.

ii. Ceriodaphnia dubia

A. If the NOEC for survival is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TLP3B.

B. Report the NOEC value for survival, Parameter No. TOP3B.

C. Report the NOEC value for reproduction, Parameter No. TPP3B.

D. If the No Observed Effect Concentration (NOEC) for reproduction is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TGP3B.

E. Report the highest (critical dilution or control) Coefficient of Variation, Parameter No. TQP3B.

iii. The permittee shall report the following results for all VALID toxicity retests on the DMR for that Monitoring Period.

A. Retest #1 (STORET 22415): If the first monthly retest following failure of a routine test for either test species results in an NOEC for survival less than the critical dilution, report a "1"; otherwise, report a "0".

OTHER REQUIREMENTS (cont.)

Retest #1 (STORET 22418): If the first monthly retest following failure of a routine test for either test species results in an NOEC for growth or reproduction that is less than the critical dilution, report a "1"; otherwise, report a "0".

B. Retest #2 (STORET 22416): If the second monthly retest following failure of a routine test for either test species results in an NOEC for survival less than the critical dilution, report a "1"; otherwise, report a "0".

Retest #2 (STORET 22419): If the second monthly retest following failure of a routine test for either test species results in an NOEC for growth or reproduction that is less than the critical dilution, report a "1"; otherwise, report a "0".

C. Retest #3 (STORET 51443): If the third monthly retest following failure of a routine test for either test species results in an NOEC for survival less than the critical dilution, report a "1"; otherwise, report a "0".

Retest #3 (STORET 51444): If the third monthly retest following failure of a routine test for either test species results in an NOEC for growth or reproduction that is less than the critical dilution, report a "1"; otherwise, report a "0".

If, for any reason, a retest cannot be performed during the Monitoring Period in which the triggering routine test failure is experienced, the permittee shall report it on the following Monitoring Period's DMR, and the comments section of the DMRs shall be annotated to that effect. If retesting is not required during a given Monitoring Period, the permittee shall leave these DMR fields blank.

The permittee shall submit the toxicity testing information contained in Table 1 of this permit with the DMR subsequent to each and every toxicity test Monitoring Period. The DMR and the summary table should be sent to the address indicated in 4.a.

5. **MONITORING FREQUENCY REDUCTION**

a. Upon successfully passing the first four consecutive quarters of WET testing after permit issuance/reissuance and in the absence of subsequent lethal and/or sub-lethal toxicity for one or both test species at or below the critical dilution, the permittee may apply for a testing frequency reduction. If granted, the monitoring frequency for that test species may be reduced to not less than once per year for the less sensitive species (usually the Fathead minnow) and not less than twice per year for the more sensitive test species (usually the Ceriodaphnia dubia).

b. CERTIFICATION - The permittee must certify in writing that no test failures have occurred and that all tests meet all test acceptability criteria in item 3.a above. In addition, the permittee must provide a list with each test performed including test initiation date, species, NOECs for lethal and sub-lethal effects, and the maximum coefficient of variation for the controls. Upon review and acceptance of this information the agency will issue a letter of confirmation of the monitoring frequency reduction. A copy of the letter will be forwarded to the agency's Permit Compliance Unit to update the permit reporting requirements.

c. This monitoring frequency reduction applies only until the expiration date of this permit, at which time the Monitoring Frequency/Monitoring Period for both test species reverts to once per quarter until the permit is re-issued.

d. LETHAL AND/OR SUB-LETHAL FAILURES - If any test fails the lethal and/or sub-lethal endpoint at any time during the term of this permit, three monthly retests are required and the monitoring frequency for the affected test species shall be increased to once per quarter until the permit is re-issued. Monthly

OTHER REQUIREMENTS (cont.)

retesting is not required if the permittee is performing a TRE.

6. TOXICITY REDUCTION EVALUATION (TRE)

a. The permittee shall submit a **Toxicity Reduction Evaluation (TRE) Action Plan and Schedule** for conducting a TRE for the following:

i. If lethal effects have been demonstrated: within (90) days of confirming lethality in any retest; or

ii. If only sub-lethal effects have been demonstrated: within (90) days of confirming sub-lethality at 75% effluent dilution or lower in any two out of three retests.

The **TRE Action Plan** shall specify the approach and methodology to be used in performing the TRE. A Toxicity Reduction Evaluation is an investigation intended to determine those actions necessary to achieve compliance with water quality-based effluent requirements and/or chemical-specific limits by reducing an effluent's toxicity (includes sub-lethal toxicity, if applicable) to an acceptable level. A TRE is defined as a step-wise process which combines toxicity testing and analyses of the physical and chemical characteristics of a toxic effluent to identify the constituents causing effluent lethal and/or sub-lethal toxicity and/or treatment methods which will reduce the effluent toxicity. The **TRE Action Plan** shall lead to the successful elimination of effluent lethal and/or sub-lethal toxicity at the critical dilution and include the following:

i. Specific Activities. The plan shall detail the specific approach the permittee intends to utilize in conducting the TRE. The approach may include toxicity characterizations, identifications and confirmation activities, source evaluation, treatability studies, or alternative approaches. When the permittee conducts Toxicity Characterization Procedures the permittee shall perform multiple characterizations and follow the procedures specified in the documents **"Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures" (EPA-600/6-91/003)** and **"Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I" (EPA-600/6-91/005)**, or alternate procedures. When the permittee conducts Toxicity Identification Evaluations and Confirmations, the permittee shall perform multiple identifications and follow the methods specified in the documents **"Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/080)** and **"Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/081)**, as appropriate;

The documents referenced above may be obtained through the National Technical Information Service (NTIS) by phone at 1-800-553-6847, or by writing:

U.S. Department of Commerce
National Technical Information Service
5285 Port Royal Road
Springfield, VA 22161

ii. Sampling Plan (e.g., locations, methods, holding times, chain of custody, preservation, etc.). The effluent sample volume collected for all tests shall be adequate to perform the toxicity test, toxicity characterization, identification and confirmation procedures, and conduct chemical specific analyses when a probable toxicant has been identified;

Where the permittee has identified or suspects specific pollutant(s) and/or source(s) of effluent toxicity, the permittee shall conduct, concurrent with toxicity testing, chemical specific analyses for the identified and/or suspected pollutant(s) and/or source(s) of effluent toxicity. Where lethality was demonstrated within 48 hours of test initiation, each 24-hour composite sample shall be

OTHER REQUIREMENTS (cont.)

analyzed independently. Otherwise the permittee may substitute a composite sample, comprised of equal portions of the individual 24-hour composite samples, for the chemical specific analysis;

iii. Quality Assurance Plan (e.g., QA/QC implementation, corrective actions, etc.); and

iv. Project Organization (e.g., project staff, project manager, consulting services, etc.).

b. The permittee shall initiate the **TRE Action Plan** within thirty (30) days of plan and schedule submittal. The permittee shall assume all risks for failure to achieve the required toxicity reduction.

c. The permittee shall submit a quarterly **TRE Activities Report**, with the Discharge Monitoring Report in the months of January, April, July, and October, containing information on toxicity reduction evaluation activities including:

i. any data and/or substantiating documentation which identify the pollutant(s) and/or source(s) of effluent lethal and/or sub-lethal toxicity;

ii. any studies/evaluations and results on the treatability of the facility's effluent lethal and/or sub-lethal toxicity; and

iii. any data which identify effluent toxicity control mechanisms that will reduce effluent toxicity to achieve compliance with permit biomonitoring requirements and/or chemical-specific limits.

The **TRE Activities Report** shall be submitted to the following addresses:

Department of Environmental Quality
Office of Environmental Compliance
P.O. Box 4312
Baton Rouge, Louisiana 70821-4312
Attn: Permit Compliance Unit

U.S. Environmental Protection Agency, Region 6
Water Enforcement Branch
1445 Ross Avenue
Dallas, Texas 75202

d. The permittee shall submit a Final Report on Toxicity Reduction Evaluation Activities no later than twenty-eight (28) months from confirming lethality and/or sub-lethality (if applicable) in the retests, which provides information pertaining to the specific control mechanism selected that will, when implemented, result in the permittee achieving compliance with permit biomonitoring requirements and/or chemical-specific limits. The report will also provide a specific corrective action schedule for implementing the selected control mechanism.

A copy of the Final Report on Toxicity Reduction Evaluation Activities shall also be submitted to the above addresses.

e. Quarterly testing during the TRE is a minimum monitoring requirement. LDEQ recommends that permittees required to perform a TRE not rely on quarterly testing alone to ensure success in the TRE, and that additional screening tests be performed to capture toxic samples for identification of toxicants. At the end of the TRE, LDEQ will consider all information submitted and establish appropriate controls to prevent future toxic discharges, including WET and/or chemical-specific limits per state regulations at LAC 33:IX.2707.D.1.e.

TABLE 1
SUMMARY SHEET
Ceriodaphnia dubia SURVIVAL AND REPRODUCTION TEST

PERMITTEE:_____
FACILITY SITE:_____
LPDES PERMIT NUMBER:_____
OUTFALL IDENTIFICATION:_____
OUTFALL SAMPLE IS FROM _____SINGLE _____MULTIPLE DISCHARGE
BIOMONITORING LABORATORY:_____
DILUTION WATER USED:_____RECEIVING WATER _____LAB WATER
CRITICAL DILUTION _____% DATE TEST INITIATED_____

1. LOW-FLOW LETHALITY:

Is the mean survival at 7 days significantly less (p=0.05) than the control survival at the low-flow or critical dilution?
_____Yes _____No

PERCENT SURVIVAL - Ceriodaphnia

TIME OF READING	PERCENT EFFLUENT					
	0 %	30%	40%	54%	72%	96%
24-HOUR						
48-HOUR						
7-DAY						

2. LOW-FLOW NON-LETHALITY:

Is the mean number of young produced per female at 7 days significantly less (p=0.05) than the control's number of young per female for the low-flow or critical dilution? ____Yes _____No

NUMBER OF YOUNG PRODUCED PER FEMALE @ 7 DAYS - Ceriodaphnia

REPLICATE	PERCENT EFFLUENT					
	0 %	30%	40%	54%	72%	96%
A B C D E F G H I J						
Mean No. of young						
CV%*						

* Coefficient of variation = Standard Deviation * 100/mean

3. Are the test results to be considered valid? _____Yes _____No
If _X_no (test invalid) , what reasons for invalidity?

4. Is this a retest of a previous invalid test? _____Yes _____No

Is this a retest of a previous test failure? _____Yes _____No

5. Enter percent effluent corresponding to each NOEC (No Observed Effect Concentration) for Ceriodaphnia:

a. NOEC SURVIVAL = _____% effluent

b. NOEC REPRODUCTION = _____% effluent

TABLE 1
SUMMARY SHEET
Pimephales promelas ("fathead minnow") SURVIVAL AND GROWTH TEST

PERMITTEE:_____
FACILITY SITE:_____
LPDES PERMIT NUMBER:_____
OUTFALL IDENTIFICATION:_____
OUTFALL SAMPLE IS FROM _____SINGLE _____MULTIPLE DISCHARGE
BIOMONITORING LABORATORY:_____
DILUTION WATER USED:_____RECEIVING WATER _____LAB WATER
CRITICAL DILUTION _____% DATE TEST INITIATED_____

1. LOW-FLOW LETHALITY:

Is the mean survival at 7 days significantly less (p=0.05) than the control survival at the low-flow or critical dilution?
_____Yes _____No

PERCENT SURVIVAL - Pimephales

PERCENT EFFLUENT	% SURVIVAL / REPLICATES				MEAN % SURVIVAL			CV %
	A	B	C	D	24-HR	48-HR	7 DAY	
0%								
30%								
40%								
54%								
72%								
96%								

2. LOW-FLOW NON-LETHALITY:

Is the mean dry weight (growth) at 7 days significantly less (p=0.05) than the control's dry weight (growth) for the low-flow or critical dilution? _____Yes _____No

DATA TABLE FOR GROWTH - Pimephales

PERCENT EFFLUENT	AVERAGE DRY WEIGHT IN MILLIGRAMS IN REPLICATE CHAMBERS					MEAN DRY WEIGHT	CV%*
	A	B	C	D	E		
0%							
30%							
40%							
54%							
72%							
96%							

* Coefficient of variation – standard deviation x 100/mean

3. Are the test results to be considered valid? _____Yes _____No
If _X_no (test invalid) , what reasons for invalidity?

4. Is this a retest of a previous invalid test? _____Yes _____No
Is this a retest of a previous test failure? _____Yes _____No

5. Enter percent effluent corresponding to each NOEC (No Observed Effect Concentration) for Pimephales:

a. NOEC SURVIVAL = _____% effluent

b. NOEC GROWTH = _____% effluent

PART III
STANDARD CONDITIONS FOR LPDES PERMITS

SECTION A. GENERAL CONDITIONS

1. Introduction
   In accordance with the provisions of LAC 33:IX.2701, et seq., this permit incorporates either expressly or by reference ALL conditions and requirements applicable to Louisiana Pollutant Discharge Elimination System Permits (LPDES) set forth in the Louisiana Environmental Quality Act (LEQA), as amended, as well as ALL applicable regulations.

2. Duty to Comply
   The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act (CWA) and the Louisiana Environmental Quality Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

3. Penalties for Violation of Permit Conditions
   a. LA. R. S. 30:2025 provides for civil penalties for violations of these regulations and the Louisiana Environmental Quality Act. LA. R. S. 30:2076.2 provides for criminal penalties for violation of any provisions of the LPDES or any order or any permit condition or limitation issued under or implementing any provisions of the LPDES program. (See Section E. Penalties for Violation of Permit Conditions for additional details).

   b. Any person may be assessed an administrative penalty by the State Administrative Authority under LA. R. S. 30:2025 for violating a permit condition or limitation implementing any of the requirements of the LPDES program in a permit issued under the regulations or the Louisiana Environmental Quality Act.

4. Toxic Pollutants
   a. Other effluent limitations and standards under Sections 301, 302, 303, 307, 318, and 405 of the Clean Water Act. If any applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of the Clean Water Act for a toxic pollutant and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, the state administrative authority shall institute proceedings under these regulations to modify or revoke and reissue the permit to conform to the toxic effluent standard or prohibition.

   b. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions, or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.

5. Duty to Reapply
   a. Individual Permits. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The new application shall be submitted at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the state administrative authority. (The state administrative authority shall not grant permission for applications to be submitted later than the expiration date of the existing permit.) Continuation of expiring permits shall be governed by regulations promulgated at LAC 33:IX.2321 and any subsequent amendments.

b. General Permits. General permits expire five years after the effective date. The 180-day reapplication period as defined above is not applicable to general permit authorizations. Reissued general permits may provide automatic coverage for permittees authorized under the previous version of the permit, and no new application is required. Requirements for obtaining authorization under the reissued general permit will be outlined in Part I of the new permit. Permittees authorized to discharge under an expiring general permit should follow the requirements for obtaining coverage under the new general permit to maintain discharge authorization.

6. Permit Action
This permit may be modified, revoked and reissued, or terminated for cause in accordance with LAC 33:IX.2903, 2905, 2907, 3105 and 6509. The causes may include, but are not limited to, the following:

a. Noncompliance by the permittee with any condition of the permit;

b. The permittee's failure in the application or during the permit issuance process to disclose fully all relevant f acts, or the permittee's misrepresentation of any relevant facts at any time;

c. A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination;

d. A change in any condition that requires either a temporary or a permanent reduction or elimination of any discharge; or

e. Failure to pay applicable fees under the provisions of LAC 33: IX. Chapter 13;

f. Change of ownership or operational control;

The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

7. Property Rights
This permit does not convey any property rights of any sort, or any exclusive privilege.

8. Duty to Provide Information
The permittee shall furnish to the state administrative authority, within a reasonable time, any information which the state administrative authority may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the state administrative authority, upon request, copies of records required to be kept by this permit.

9. Criminal and Civil Liability
Except as provided in permit conditions on "Bypassing" and "Upsets", nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. Any false or materially misleading representation or concealment of information required to be reported by the provisions of the permit, the Act, or applicable regulations, which avoids or effectively defeats the regulatory purpose of the Permit may subject the Permittee to criminal enforcement pursuant to La. R.S. 30:2025.

10. Oil and Hazardous Substance Liability
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Clean Water Act.

11. State Laws
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Clean Water Act.

12. Severability
If any provision of these rules and regulations, or the application thereof, is held to be invalid, the remaining provisions of these rules and regulations shall not be affected, so long as they can be given effect without the invalid provision. To this end, the provisions of these rules and regulations are declared to be severable.

13. Dilution
A permittee shall not achieve any effluent concentration by dilution unless specifically authorized in the permit. A permittee shall not increase the use of process water or cooling water or otherwise attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve permit limitations or water quality.

14. Facilities Requiring Approval from Other State Agencies
In accordance with La R.S.40.4(A)(6) the plans and specifications of all sanitary sewerage treatment systems, both public and private, must be approved by the Department of Health and Hospitals state health officer or his designee. It is unlawful for any person, firm, or corporation, both municipal and private to operate a sanitary sewage treatment facility without proper authorization from the state health officer.

In accordance with La R.S.40.1149, it is unlawful for any person, firm or corporation, both municipal and private, operating a sewerage system to operate that system unless the competency of the operator is duly certified by the Department of Health and Hospitals state health officer. Furthermore, it is unlawful for any person to perform the duties of an operator without being duly certified.

In accordance with La R.S.48.385, it is unlawful for any industrial wastes, sewage, septic tanks effluent, or any noxious or harmful matter, solid, liquid or gaseous to be discharged into the side or cross ditches or placed upon the rights-of-ways of state highways without the prior written consent of the Department of Transportation and Development chief engineer or his duly authorized representative and of the secretary of the Department of Health and Hospitals.

SECTION B. PROPER OPERATION AND MAINTENANCE

1. Need to Halt or Reduce not a Defense
It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

2. Duty to Mitigate
The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. The permittee shall also take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with the permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

3. Proper Operation and Maintenance
   a. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

   b. The permittee shall provide an adequate operating staff which is duly qualified to carry out operation, maintenance and other functions necessary to ensure compliance with the conditions of this permit.

4. Bypass of Treatment Facilities
   a. ***Bypass***. The intentional diversion of waste streams from any portion of a treatment facility.

   b. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Section B.4.c. and 4.d of these standard conditions.

   c. Notice
      (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice to the Office of Environmental Services, Water Permits Division, if possible at least ten days before the date of the bypass.

      (2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in LAC 33:IX.2701.L.6, (24-hour notice) and Section D.6.e. of these standard conditions.

   d. Prohibition of bypass
      (1) Bypass is prohibited, and the state administrative authority may take enforcement action against a permittee for bypass, unless:

         (a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

         (b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and,

         (c) The permittee submitted notices as required by Section B.4.c of these standard conditions.

      (2) The state administrative authority may approve an anticipated bypass after considering its adverse effects, if the state administrative authority determines that it will meet the three conditions listed in Section B.4.d(1) of these standard conditions.

5. Upset Conditions
   a. Upset. An exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

   b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Section B.5.c. are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

   c. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
      (1) An upset occurred and that the permittee can identify the cause(s) of the upset;

      (2) The permitted facility was at the time being properly operated; and

      (3) The permittee submitted notice of the upset as required by LAC 33:IX.2701.L.6.b.ii. and Section D.6.e.(2) of these standard conditions; and

(4) The permittee complied with any remedial measures required by Section B.2 of these standard conditions.

d. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

6. Removed Substances
Solids, sewage sludges, filter backwash, or other pollutants removed in the course of treatment or wastewater control shall be properly disposed of in a manner such as to prevent any pollutant from such materials from entering waters of the state and in accordance with environmental regulations.

7. Percent Removal
For publicly owned treatment works, the 30-day average percent removal for Biochemical Oxygen Demand and Total Suspended Solids shall not be less than 85 percent in accordance with LAC 33:IX.5905.A.3. and B.3.

SECTION C. MONITORING AND RECORDS

1. Inspection and Entry
The permittee shall allow the state administrative authority or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon the presentation of credentials and other documents as may be required by the law to:
a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit.

Enter upon the permittee's premises where a discharge source is or might be located or in which monitoring equipment or records required by a permit are kept for inspection or sampling purposes. Most inspections will be unannounced and should be allowed to begin immediately, but in no case shall begin more than thirty (30) minutes after the time the inspector presents his/her credentials and announces the purpose(s) of the inspection. Delay in excess of thirty (30) minutes shall constitute a violation of this permit. However, additional time can be granted if the inspector or the Administrative Authority determines that the circumstances warrant such action; and

b. Have access to and copy, at reasonable times, any records that the department or its authorized representative determines are necessary for the enforcement of this permit. For records maintained in either a central or private office that is open only during normal office hours and is closed at the time of inspection, the records shall be made available as soon as the office is open, but in no case later than the close of business the next working day;

c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act or the Louisiana Environmental Quality Act, any substances or parameters at any location.

e. Sample Collection
(1) When the inspector announces that samples will be collected, the permittee will be given an additional thirty (30) minutes to prepare containers in order to collect duplicates. If the permittee cannot obtain and prepare sample containers within this time, he is considered to have waived his right to collect duplicate samples and the sampling will proceed immediately. Further delay on the part of the permittee in allowing initiation of the sampling will constitute a violation of this permit.
(2) At the discretion of the administrative authority, sample collection shall proceed immediately (without the additional 30 minutes described in Section C.1.a. above) and the inspector shall supply the permittee with a duplicate sample.

f. It shall be the responsibility of the permittee to ensure that a facility representative familiar with provisions of its wastewater discharge permit, including any other conditions or limitations, be available either by phone or in person at the facility during all hours of operation. The absence of such personnel on-site who are familiar with the permit shall not be grounds for delaying the initiation of an inspection except in situations as described in Section C.1.b. of these standard conditions. The permittee shall be responsible for providing witnesses/escorts during inspections. Inspectors shall abide by all company safety rules and shall be equipped with standard safety equipment (hard hat, safety shoes, safety glasses) normally required by industrial facilities.

g. Upon written request copies of field notes, drawings, etc., taken by department personnel during an inspection shall be provided to the permittee after the final inspection report has been completed.

2. Representative Sampling
Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. All samples shall be taken at the outfall location(s) indicated in the permit. The state administrative authority shall be notified prior to any changes in the outfall location(s). Any changes in the outfall location(s) may be subject to modification, revocation and reissuance in accordance with LAC 33:IX.2903.

3. Retention of Records
Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report, or application. This period may be extended by request of the state administrative authority at any time.

4. Record Contents
Records of monitoring information shall include:

a. The date, exact place, and time of sampling or measurements;
b. The individual(s) who performed the sampling or measurements;
c. The date(s) analyses were performed;
d. The time(s) analyses were begun;
e. The individual(s) who performed the analyses;
f. The analytical techniques or methods used;
g. The results of such analyses; and
h. The results of all quality control procedures.

5. Monitoring Procedures
a. Monitoring results must be conducted according to test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, unless other test procedures have been specified in this permit.

b. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instruments at intervals frequent enough to insure accuracy of measurements and shall maintain appropriate records of such activities.

c. The permittee or designated laboratory shall have an adequate analytical quality assurance/quality control program to produce defensible data of know precision and accuracy. All quality control measures shall be assessed and evaluated on an on-going basis and quality control acceptance criteria shall be used to determine the validity of the data. All method specific quality control as prescribed in the method shall be followed. If quality control requirements are not included in the method, the permittee or designated laboratory shall follow the quality control requirements as prescribed in the Approved Edition (40 CFR Part 136) Standard Methods for the Examination of Water and Wastes, Sections 1020A and 1020B. General sampling protocol shall follow guidelines established in the

"Handbook for Sampling and Sample Preservation of Water and Wastewater, 1982 "U.S. Environmental Protection Agency. This publication is available from the National Technical Information Service (NTIS), Springfield, VA 22161, Phone number (800) 553-6847. Order by NTIS publication number PB-83-124503.

6. Flow Measurements
Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to insure that the accuracy of the measurements are consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10% from true discharge rates throughout the range of expected discharge volumes. Guidance in selection, installation, calibration and operation of acceptable flow measurement devices can be obtained from the following references:
   a. "A Guide to Methods and Standards for the Measurement of Water Flow, 1975," U.S. Department of Commerce, National Bureau of Standards. This publication is available from the National Technical Information Service (NTIS), Springfield, VA 22161, Phone number (800) 553-6847. Order by NTIS publication number COM-75-10683.
   b. "Flow Measurement in Open Channels and Closed Conduits, Volumes 1 and 2," U.S. Department of Commerce, National Bureau of Standards. This publication is available from the National Technical Service (NTIS), Springfield, VA, 22161, Phone number (800) 553-6847. Order by NTIS publication number PB-273 535.
   c. "NPDES Compliance Flow Measurement Manual," U.S. Environmental Protection Agency, Office of Water Enforcement. This publication is available from the National Technical Information Service (NTIS), Springfield, VA 22161, Phone number (800) 553-6847. Order by NTIS publication number PB-82-131178.

7. Prohibition for Tampering; Penalties
   a. LA R.S. 30:2025 provides for punishment of any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit.

   b. LA R.S. 30:2076.2 provides for penalties for any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non compliance.

8. Additional Monitoring by the Permittee
If the Permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 (See LAC 33:IX.4901) or, in the case of sludge use and disposal, approved under 40 CFR Part 136 (See LAC 33:IX.4901) unless otherwise specified in 40 CFR Part 503, or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the state administrative authority.

9. Averaging of Measurements
Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the state administrative authority in the permit.

10. Laboratory Accreditation
   a. LAC 33:I.Subpart 3, Chapters 45-59 provide requirements for an accreditation program specifically applicable to commercial laboratories, wherever located, that provide chemical analyses, analytical results, or other test data to the department, by contract or by agreement, and the data is:
      (1) Submitted on behalf of any facility, as defined in R.S.30:2004;
      (2) Required as part of any permit application;
      (3) Required by order of the department;
      (4) Required to be included on any monitoring reports submitted to the department;
      (5) Required to be submitted by contractor
      (6) Otherwise required by department regulations.

b. The department laboratory accreditation program, Louisiana Environmental Laboratory Accreditation Program (LELAP) is designed to ensure the accuracy, precision, and reliability of the data generated, as well as the use of department-approved methodologies in generation of that data. Laboratory data generated by commercial environmental laboratories that are not (LELAP) accredited will not be accepted by the department. Retesting of analysis will be required by an accredited commercial laboratory.

Where retesting of effluent is not possible (i.e. data reported on DMRs for prior month's sampling), the data generated will be considered invalid and in violation of the LPDES permit.

c. Regulations on the Louisiana Environmental Laboratory Accreditation Program and a list of labs that have applied for accreditation are available on the department website located under DIVISIONS → LABORATORY SERVICES at the following link:

http://www.deq.louisiana.gov

Questions concerning the program may be directed to (225) 219-9800.

SECTION D. REPORTING REQUIREMENTS

1. Facility Changes
The permittee shall give notice to the state administrative authority as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
   a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or

   b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under LAC 33:IX.2703.A.1.

   c. For Municipal Permits. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to Section 301, or 306 of the CWA if it were directly discharging those pollutants; and any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit. In no case are any new connections, increased flows, or significant changes in influent quality permitted that will cause violation of the effluent limitations specified herein.

2. Anticipated Noncompliance
The permittee shall give advance notice to the state administrative authority of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

3. Transfers
This permit is not transferable to any person except after notice to the state administrative authority. The state administrative authority may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Clean Water Act or the Louisiana Environmental Quality Act. (See LAC 33:IX.2901; in some cases, modification or revocation and reissuance is mandatory.)

A permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued (under LAC 33:IX.2903. A.2.b), or a minor modification made (under LAC 33:IX.2905) to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act and the Louisiana Environmental Quality Act.

4. Monitoring Reports
Monitoring results shall be reported at the intervals and in the form specified in Part I or Part II of this permit.

The permittee shall submit properly completed Discharge Monitoring Reports (DMRs) on the form specified in the permit. Preprinted DMRs are provided to majors/92-500's and other designated facilities. Please contact the Permit Compliance Unit concerning preprints. Self-generated DMRs must be pre-approved by the Permit Compliance Unit prior to submittal. Self-generated DMRs are approved on an individual basis. Requests for approval of self-generated DMRs should be submitted to:

Supervisor, Permit Compliance Unit
Office of Environmental Compliance
Post Office Box 4312
Baton Rouge, LA 70821-4312

Copies of blank DMR templates, plus instructions for completing them, and EPA's LPDES Reporting Handbook are available at the department website located at:

http://www.deq.louisiana.gov/portal/Default.aspx?tabid=2276

5. Compliance Schedules
Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

6. Requirements for Notification

a. Emergency Notification
As required by LAC 33.I.3915, in the event of an unauthorized discharge that does cause an emergency condition, the discharger shall notify the hotline (DPS 24-hour Louisiana Emergency Hazardous Materials Hotline) by telephone at (225) 925-6595 (collect calls accepted 24 hours a day) immediately (a reasonable period of time after taking prompt measures to determine the nature, quantity, and potential off-site impact of a release, considering the exigency of the circumstances), but in no case later than one hour after learning of the discharge. (An emergency condition is any condition which could reasonably be expected to endanger the health and safety of the public, cause significant adverse impact to the land, water, or air environment, or cause severe damage to property.) Notification required by this section will be made regardless of the amount of discharge. Prompt Notification Procedures are listed in Section D.6.c. of these standard conditions.

A written report shall be provided within seven calendar days after the notification. The report shall contain the information listed in Section D.6.d. of these standard conditions and any additional information in LAC 33:I.3925.B.

b. Prompt Notification
As required by LAC 33:I.3917, in the event of an unauthorized discharge that exceeds a reportable quantity specified in LAC 33:I.Subchapter E, but does not cause an emergency condition, the discharger shall promptly notify the department within 24 hours after learning of the discharge. Notification should be made to the Office of Environmental Compliance, Surveillance Division Single Point of Contact (SPOC) in accordance with LAC 33:I.3923.

In accordance with LAC 33:I.3923, prompt notification shall be provided within a time frame not to exceed 24 hours and shall be given to the Office of Environmental Compliance, Surveillance Division Single Point of Contact (SPOC) as follows:

(1) by the Online Incident Reporting screens found at http://www3.deq.louisiana.gov/surveillance/irf/forms/ ;or

(2) by e-mail utilizing the Incident Report Form and instructions found at http://www.deq.louisiana.gov/portal/Default.aspx?tabid=279;or

(3) by telephone at (225) 219-3640 during office hours, or (225) 342-1234 after hours and on weekends and holidays.

c. Content of Prompt Notifications. The following guidelines will be utilized as appropriate, based on the conditions and circumstances surrounding any unauthorized discharge, to provide relevant information regarding the nature of the discharge:

(1) the name of the person making the notification and the telephone number where any return calls from response agencies can be placed;

(2) the name and location of the facility or site where the unauthorized discharge is imminent or has occurred, using common landmarks. In the event of an incident involving transport, include the name and address of the transporter and generator;

(3) the date and time the incident began and ended, or the estimated time of continuation if the discharge is continuing;

(4) the extent of any injuries and identification of any known personnel hazards that response agencies may face;

(5) the common or scientific chemical name, the U.S. Department of Transportation hazard classification, and the best estimate of amounts of any and all discharged pollutants;

(6) a brief description of the incident sufficient to allow response agencies to formulate their level and extent of response activity.

d. Written Notification Procedures. Written reports for any unauthorized discharge that requires notification under Section D.6.a. or 6.b., or shall be submitted by the discharger to the Office of Environmental Compliance, Surveillance Division SPOC in accordance with LAC 33:IX.3925 within seven calendar days after the notification required by D.6.a. or 6.b., unless otherwise provided for in a valid permit or other department regulation. Written notification reports shall include, but not be limited to, the following information:

(1) the name, address, telephone number, Agency Interest (AI) number (number assigned by the department) if applicable, and any other applicable identification numbers of the person, company, or other party who is filing the written report, and specific identification that the report is the written follow-up report required by this section;

(2) the time and date of prompt notification, the state official contacted when reporting, the name of person making that notification, and identification of the site or facility, vessel, transport vehicle, or storage area from which the unauthorized discharge occurred;

(3) date(s), time(s), and duration of the unauthorized discharge and, if not corrected, the anticipated time it is expected to continue;

(4) details of the circumstances (unauthorized discharge description and root cause) and events leading to any unauthorized discharge, including incidents of loss of sources of radiation, and if the release point is subject to a permit:

(a) the current permitted limit for the pollutant(s) released;and

(b) the permitted release point/outfall ID.

(5) the common or scientific chemical name of each specific pollutant that was released as the result of an unauthorized discharge, including the CAS number and U.S. Department of Transportation hazard classification, and the best estimate of amounts of any and all released pollutants (total amount of each compound expressed in pounds, including calculations);

(6) a statement of the actual or probable fate or disposition of the pollutant or source of radiation and what off-site impact resulted;

(7) remedial actions taken, or to be taken, to stop unauthorized discharges or to recover pollutants or sources of radiation.

(8) Written notification reports shall be submitted to the Office of Environmental Compliance, Surveillance Division SPOC by mail or fax. The transmittal envelope and report or fax cover page and report should be clearly marked "**UNAUTHORIZED DISCHARGE NOTIFICATION REPORT**."

Please see LAC 33:I.3925.B for additional written notification procedures.

e. Twenty-four Hour Reporting. The permittee shall report any noncompliance which may endanger human health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and; steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The following shall be included as information which must be reported within 24hours:
(1) Any unanticipated bypass which exceeds any effluent limitation in the permit (see LAC 33:IX.2701.M.3.b.);

(2) Any upset which exceeds any effluent limitation in the permit;

(3) Violation of a maximum daily discharge limitation for any of the pollutants listed by the state administrative authority in Part II of the permit to be reported within 24 hours (LAC 33:IX.2707.G.).

7. Other Noncompliance
The permittee shall report all instances of noncompliance not reported under Section D.4., 5., and 6., at the time monitoring reports are submitted. The reports shall contain the information listed in Section D.6.e.

8. Other Information
Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the state administrative authority, it shall promptly submit such facts or information.

9. Discharges of Toxic Substances
In addition to the reporting requirements under Section D.1-8, all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Office of Environmental Services, Water Permits Division as soon as they know or have reason to believe:
a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant:
i. listed at LAC 33:IX.7107, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following notification levels:
(1) One hundred micrograms per liter (100 µg/L);
(2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4 -dinitro-phenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
(3) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with LAC33:IX.2501.G.7; or
(4) The level established by the state administrative authority in accordance with LAC 33:IX.2707.F; or

ii. which exceeds the reportable quantity levels for pollutants at LAC 33:I. Subchapter E.

b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant:
   i. listed at LAC 33:IX.7107, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

      (1) Five hundred micrograms per liter (500 µg/L);
      (2) One milligram per liter (1 mg/L) for antimony;
      (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with LAC 33:IX.2501.G.7; or
      (4) The level established by the state administrative authority in accordance with LAC 33:IX.2707.F; or

   ii. which exceeds the reportable quantity levels for pollutants at LAC 33:I. Subchapter E.

10. Signatory Requirements

All applications, reports, or information submitted to the state administrative authority shall be signed and certified.

a. All permit applications shall be signed as follows:
   (1) For a corporation - by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
      (a) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation; or,
      (b) The manager of one or more manufacturing, production, or operating facilities, provided: the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations and initiating and directing other comprehensive measures to ensure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and the authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

   NOTE: DEQ does not require specific assignments or delegations of authority to responsible corporate officers identified in Section D.10.a.(1)(a). The agency will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the state administrative authority to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate positions under Section D.10.a.(1)(b) rather than to specific individuals.

   (2) For a partnership or sole proprietorship - by a general partner or the proprietor, respectively; or
   (3) For a municipality, state, federal, or other public agency - by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal agency includes:
      (a) The chief executive officer of the agency, or
      (b) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

b. All reports required by permits and other information requested by the state administrative authority shall be signed by a person described in Section D.10.a., or by a duly authorized representative of that person. A person is a duly authorized representative only if:
   (1) The authorization is made in writing by a person described in Section D.10.a. of these standard conditions;

(2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company, (a duly authorized representative may thus be either a named individual or an individual occupying a named position; and,

(3) The written authorization is submitted to the state administrative authority.

c. Changes to authorization. If an authorization under Section D.10.b. is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Section D.10.b. must be submitted to the state administrative authority prior to or together with any reports, information, or applications to be signed by an authorized representative.

d. Certification. Any person signing a document under Section D.10. a. or b. above, shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

11. Availability of Reports

All recorded information (completed permit application forms, fact sheets, draft permits, or any public document) not classified as confidential information under R.S. 30:2030(A) and 30:2074(D) and designated as such in accordance with these regulations (LAC 33:IX.2323 and LAC 33:IX.6503) shall be made available to the public for inspection and copying during normal working hours in accordance with the Public Records Act, R.S. 44:1 et seq.

Claims of confidentiality for the following will be denied:

a. The name and address of any permit applicant or permittee;
b. Permit applications, permits, and effluent data.
c. Information required by LPDES application forms provided by the state administrative authority under LAC 33:IX.2501 may not be claimed confidential. This includes information submitted on the forms themselves and any attachments used to supply information required by the forms.

SECTION E. PENALTIES FOR VIOLATIONS OF PERMIT CONDITION

1. Criminal

a. Negligent Violations

The Louisiana Revised Statutes LA. R. S. 30:2076.2 provides that any person who negligently violates any provision of the LPDES, or any order issued by the secretary under the LPDES, or any permit condition or limitation implementing any such provision in a permit issued under the LPDES by the secretary, or any requirement imposed in a pretreatment program approved under the LPDES is subject to a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment for not more than 1 year, or both. If a conviction of a person is for a violation committed after a first conviction of such person, he shall be subject to a fine of not more than $50,000 per day of violation, or imprisonment of not more than two years, or both.

b. Knowing Violations

The Louisiana Revised Statutes LA. R. S. 30:2076.2 provides that any person who knowingly violates any provision of the LPDES, or any permit condition or limitation implementing any such provisions in a permit issued under the LPDES, or any requirement imposed in a pretreatment program approved under

the LPDES is subject to a fine of not less than $5,000 nor more than $50,000 per day of violation, or imprisonment for not more than 3 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person, he shall be subject to a fine of not more than $100,000 per day of violation, or imprisonment of not more than six years, or both.

c. Knowing Endangerment
The Louisiana Revised Statutes LA. R. S. 30:2076.2 provides that any person who knowingly violates any provision of the LPDES, or any order issued by the secretary under the LPDES, or any permit condition or limitation implementing any of such provisions in a permit issued under the LPDES by the secretary, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than $250,000, or by imprisonment for not more than 15 years, or both. A person which is an organization shall, upon conviction of violating this Paragraph, be subject to a fine of not more than one million dollars. If a conviction of a person is for a violation committed after a first conviction of such person under this Paragraph, the maximum punishment shall be doubled with respect to both fine and imprisonment.

d. False Statements
The Louisiana Revised Statutes LA. R. S. 30:2076.2 provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under the LPDES or who knowingly falsifies, tampers with, or renders inaccurate, any monitoring device or method required to be maintained under the LPDES, shall, upon conviction, be subject to a fine of not more than $10,000, or imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this Subsection, he shall be subject to a fine of not more than $20,000 per day of violation, or imprisonment of not more than 4 years, or both.

2. Civil Penalties
The Louisiana Revised Statutes LA. R. S. 30:2025 provides that any person found to be in violation of any requirement of this Subtitle may be liable for a civil penalty, to be assessed by the secretary, an assistant secretary, or the court, of not more than the cost to the state of any response action made necessary by such violation which is not voluntarily paid by the violator, and a penalty of not more than $32,500 for each day of violation. However, when any such violation is done intentionally, willfully, or knowingly, or results in a discharge or disposal which causes irreparable or severe damage to the environment or if the substance discharged is one which endangers human life or health, such person may be liable for an additional penalty of not more than one million dollars.

(**PLEASE NOTE**: These penalties are listed in their entirety in Subtitle II of Title 30 of the Louisiana Revised Statutes.)

SECTION F. DEFINITIONS

All definitions contained in Section 502 of the Clean Water Act shall apply to this permit and are incorporated herein by reference. Additional definitions of words or phrases used in this permit are as follows:

1. Clean Water Act (CWA) means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or the Federal Water Pollution Control Act Amendments of 1972) Pub.L.92-500, as amended by Pub.L. 95-217, Pub.L. 95-576, Pub.L. 96-483 and Pub.L. 97-117, 33 U.S.C. 1251 et. seq.).

2. Accreditation means the formal recognition by the department of a laboratory's competence wherein specific tests or types of tests can be accurately and successfully performed in compliance with all minimum requirements set forth in the regulations regarding laboratory accreditation.

3. Administrator means the Administrator of the U.S. Environmental Protection Agency, or an authorized representative.

4. Applicable Standards and Limitations means all state, interstate and federal standards and limitations to which a discharge is subject under the Clean Water Act, including, effluent limitations, water quality standards of performance, toxic effluent standards or prohibitions, best management practices, and pretreatment standards under Sections 301, 302, 303, 304, 306, 307, 308 and 403.

5. Applicable water quality standards means all water quality standards to which a discharge is subject under the Clean Water Act.

6. Commercial Laboratory means any laboratory, wherever located, that performs analyses or tests for third parties for a fee or other compensation and provides chemical analyses, analytical results, or other test data to the department. The term commercial laboratory does not include laboratories accredited by the Louisiana Department of Health and Hospitals in accordance with R.S.49:1001 et seq.

7. Daily Discharge means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in terms of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the sampling day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the sampling day. Daily discharge determination of concentration made using a composite sample shall be the concentration of the composite sample.

8. Daily Maximum discharge limitation means the highest allowable "daily discharge".

9. Director means the U.S. Environmental Protection Agency Regional Administrator, or the state administrative authority, or an authorized representative.

10. Domestic septage means either liquid or solid material removed from a septic tank, cesspool, portable toilet, Type III marine sanitation device, or similar treatment works that receives only domestic sewage. Domestic septage does not include liquid or solid material removed from a septic tank, cesspool, or similar treatment works that receives either commercial wastewater or industrial wastewater and does not include grease removed from grease trap at a restaurant.

11. Domestic sewage means waste and wastewater from humans, or household operations that is discharged to or otherwise enters a treatment works.

12. Environmental Protection Agency or (EPA) means the U.S. Environmental Protection Agency.

13. Grab sample means an individual sample collected over a period of time not exceeding 15 minutes, unless more time is needed to collect an adequate sample, and is representative of the discharge.

14. Industrial user means a nondomestic discharger, as identified in 40 CFR 403, introducing pollutants to a publicly owned treatment works.

15. LEQA means the Louisiana Environmental Quality Act.

16. Louisiana Pollutant Discharge Elimination System (LPDES) means those portions of the Louisiana Environmental Quality Act and the Louisiana Water Control Law and all regulations promulgated under their authority which are deemed equivalent to the National Pollutant Discharge Elimination System (NPDES) under the Clean Water Act in accordance with Section 402 of the Clean Water Act and all applicable federal regulations.

17. Monthly Average, other than for fecal coliform bacteria, discharge limitations are calculated as the sum of all "daily discharge(s)" measured during a calendar month divided by the number of "daily discharge(s)" measured during that month. When the permit establishes monthly average concentration effluent limitations or conditions, and flow is measured as continuous record or with a totalizer, the monthly average concentration means the arithmetic average (weighted by flow) of all "daily discharge(s)" of concentration determined during the calendar month where C = daily discharge concentration, F = daily flow and n = number of daily samples; monthly average discharge =

$$\frac{C_1F_1 + C_2F_2 + \ldots + C_nF_n}{F_1 + F_2 + \ldots + F_n}$$

When the permit establishes monthly average concentration effluent limitations or conditions, and the flow is not measured as a continuous record, then the monthly average concentration means the arithmetic average of all "daily discharge(s)" of concentration determined during the calendar month.

The monthly average for fecal coliform bacteria is the geometric mean of the values for all effluent samples collected during a calendar month.

18. National Pollutant Discharge Elimination System (NPDES) means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 318, 402, and 405 of the Clean Water Act.

19. Severe property damage means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

20. Sewage sludge means a solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; portable toilet pumpings, type III marine sanitation device pumpings (33 CFR part 159); and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screenings generated during preliminary treatment of domestic sewage in a treatment works.

21. Treatment works means any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage and industrial wastes of a liquid nature to implement Section 201 of the Clean Water Act, or necessary to recycle or reuse water at the most economical cost over the estimated life of the works, including intercepting sewers, sewage collection systems, pumping, power and other equipment, and their appurtenances, extension, improvement, remodeling, additions, and alterations thereof. (See Part 212 of the Clean Water Act)

22. For fecal coliform bacteria, a sample consists of one effluent grab portion collected during a 24-hour period at peak loads.

23. The term MGD shall mean million gallons per day.

24. The term mg/L shall mean milligrams per liter or parts per million (ppm).

25. The term µg/L shall mean micrograms per liter or parts per billion (ppb).

26. The term ng/L shall mean nanograms per liter or parts per trillion (ppt).

27. Weekly average, other than for fecal coliform bacteria, is the highest allowable arithmetic mean of the daily discharges over a calendar week, calculated as the sum of all "daily discharge(s)" measured during a calendar week divided by the number of "daily discharge(s)" measured during that week. When the permit establishes weekly average concentration effluent limitations or conditions, and flow is measured as continuous record or with a totalizer, the weekly average concentration means the arithmetic average (weighted by flow) of all "daily discharge(s)" of concentration determined during the calendar week where C = daily discharge concentration, F = daily flow and n = number of daily samples; weekly average discharge

$$= \frac{C_1F_1 + C_2F_2 + \ldots + C_nF_n}{F_1 + F_2 + \ldots + F_n}$$

When the permit establishes weekly average concentration effluent limitations or conditions, and the flow is not measured as a continuous record, then the weekly average concentration means the arithmetic average of all "daily discharge(s)" of concentration determined during the calendar week.

The weekly average for fecal coliform bacteria is the geometric mean of the values for all effluent samples collected during a calendar week.

28. Sanitary Wastewater Term(s):

a. 3-hour composite sample consists of three effluent portions collected no closer together than one hour (with the first portion collected no earlier than 10:00 a.m.) over the 3-hour period and composited according to flow, or a sample continuously collected in proportion to flow over the 3-hour period.

b. 6-hour composite sample consists of six effluent portions collected no closer together than one hour (with the first portion collected no earlier than 10:00 a.m.) over the 6-hour period and composited according to flow, or a sample continuously collected in proportion to flow over the 6-hour period.

c. 12-hour composite sample consists of 12 effluent portions collected no closer together than one hour over the 12-hour period and composited according to flow, or a sample continuously collected in proportion to flow over the 12-hour period. The daily sampling intervals shall include the highest flow periods.

d. 24-hour composite sample consists of a minimum of 12 effluent portions collected at equal time intervals over the 24-hour period and combined proportional to flow or a sample continuously collected in proportion to flow over the 24-hour period.

FACT SHEET

as required by LAC 33:IX.3111 for major LPDES facilities, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0038822; AI 51970; PER20060001** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

I. **THE APPLICANT IS:** City of Grambling
Grambling Regional Wastewater Treatment Plant
P.O. Box 108
Grambling, LA 71245

II. **PREPARED BY:** Rachel Owens

DATE PREPARED: June 17, 2008

III. **PERMIT ACTION:** reissue LPDES permit LA0038822, AI 51970; PER20060001

LPDES application received: June 21, 2006

EPA has retained enforcement authority.

Previous LPDES permit effective: January 1, 2002
Previous LPDES permit expired: December 31, 2006

IV. **FACILITY INFORMATION:**

A. The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving the City of Grambling and Grambling State University.

B. The permit application does not indicate the receipt of industrial wastewater.

C. The facility is located on 7706 U.S. Highway 80 West in Grambling, Lincoln Parish.

D. The treatment facility consists of an activated sludge system using an oxidation ditch process with rotors for the aeration, and a final clarifier. Chlorine is the method of disinfection. Dechlorination is used to reduce the chlorine residual. The effluent then passes through a post aeration process prior to discharge.

E. Outfall 001

Discharge Location: Latitude 32° 30' 39" North
Longitude 92° 43' 9" West

Description: treated sanitary wastewater

Design Capacity: 1.5 MGD

Type of Flow Measurement which the facility is currently using:
Totalizing meter with Continuous Recorder

V. RECEIVING WATERS:

The discharge is into Redwine Creek, thence into the Dugdemona River, thence into Big Creek in segment 081401 of the Ouachita River Basin. This segment is not listed on the 303(d) list of impaired waterbodies.

The critical low flow (7Q10) of Redwine Creek is 0 cfs based on a report from Will Barlett, March 13, 2007. Since the 7Q10 is equal to zero, 0.1 will be used as the default 7Q10 value.

The hardness value is 28.25 mg\l and the fifteenth percentile value for TSS is 6.0 mg\l. This information was based on a report from Will Barlett, March 13, 2007.

The designated uses and degree of support for Segment 081401 of the Ouachita River Basin are as indicated in the table below[1/]:

Degree of Support of Each Use						
Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Full	Full	Full	N/A	N/A	N/A	N/A

[1/]The designated uses and degree of support for Segment 081401 of the Ouachita River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 081401 of the Ouachita River Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 27, 2007 from Boggs (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit modification and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Ms. Rachel Owens
Water Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:

Subsegment 081401, Dugdemona River from headwaters to Big Creek, is not listed on LDEQ's Final 2006 303(d) List as impaired, and to date no TMDL's have been established. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by any future TMDLs.

As per LAC 33:IX.2707.L.2.a.ii, availability of information which was not available at the time of previous permit issuance and will justify the application of less stringent effluent limitations in the proposed permit constitutes an exception to LAC 33:IX.2707.L.1, which states when a permit is renewed or reissued standards or conditions must be at least as stringent as the final limitations, standards, or conditions in the previous permit. In the previous permit, this treatment facility was required to meet effluent limitations for total zinc of 1.18 lbs/day monthly average and 2.80 lbs/day daily maximum. A water quality screen was performed using data from the application and from DMRs from January 2006 through December 2007. The screen did not indicate a need for a limitation for total zinc. Therefore, the limitation for total zinc has been removed from this permit. See Appendix B-1 for more information.

Interim Limits:

OUTFALL 001

In order to allow the permittee time to upgrade the facility to meet the newly imposed limitations for Total Copper based on the Water Quality Screen (See Appendix B-1), **the following interim effluent limitations shall become effective on the effective date of the permit, and expire three years from the effective date of the permit**

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
$CBOD_5$ May- October November- April	 125 250	 10 mg/l 20 mg/l	 15 mg/l 30 mg/l	Limits are set in accordance with the Wasteload Allocation for Redwine Creek near Grambling (WLA 88.05), September 30, 1988. Approved by EPA on January 24, 2000.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
TSS May- October November- April	 188 250	 15 mg/l 20 mg/l	 23 mg/l 30 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.
Ammonia-Nitrogen May- October Novmber-April	 25 50	 2 mg/l 4 mg/l	 4 mg/l 8 mg/l	Limits are set in accordance with the Wasteload Allocation for Redwine Creek near Grambling (WLA 88.05), September 30, 1988. Approved by EPA on January 24, 2000. Winter Limits were based on national aquatic toxcitiy concerns.
Dissolved Oxygen**	---	5 mg/l	N/A	Limits are set in accordance with the Wasteload Allocation for Redwine Creek near Grambling (WLA 88.05), September 30, 1988. Approved by EPA on January 24, 2000.

Effluent Characteristic	Monthly Avg. (lbs./day)	Daily Maximum (lbs/day)	Basis
Total Copper	Report	Report	Water Quality Screen indicated a need for a WQBL. Therefore, for monitoring and data information gathering purposes, Report is proposed in the interim period. See Appendix B-1 for additional information.

Final Effluent Limits:

Final Effluent Limits shall become effective three years from the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
$CBOD_5$ May- October November- April	 125 250	 10 mg/l 20 mg/l	 15 mg/l 30 mg/l	Limits are set in accordance with the Wasteload Allocation for Redwine Creek near Grambling (WLA 88.05), September 30, 1988. Approved by EPA on January 24, 2000..
TSS May- October November- April	 188 250	 15 mg/l 20 mg/l	 23 mg/l 30 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.
Ammonia-Nitrogen May- October Novmber- April	 25 50	 2 mg/l 4 mg/l	 4 mg/l 8 mg/l	Limits are set in accordance with the Wasteload Allocation for Redwine Creek near Grambling (WLA 88.05), September 30, 1988. Approved by EPA on January 24, 2000. Winter Limits were based on national aquatic toxcitiy concerns.
Dissolved Oxygen**		5 mg/l	N/A	Limits are set in accordance with the Wasteload Allocation for Redwine Creek near Grambling (WLA 88.05), September 30, 1988. Approved by EPA on January 24, 2000.

Effluent Characteristic	Monthly Avg. (lbs./day)	Daily Maximum (lbs/day	Basis
Total Copper*	0.078	0.186	Water Quality Screen indicated a need for a WQBL. Therefore, for monitoring and data information gathering purposes, Report is proposed in the interim period. See Appendix B-1 for additional information.

**This Dissolved Oxygen limit is the lowest allowable average of daily discharges over a calendar month. When monitoring is conducted, the Dissolved Oxygen shall be analyzed immediately, as per 40 CFR 136.3.

*The above draft priority pollutant limits for total copper are based upon the evaluation of one effluent analysis. The permittee may conduct and submit the results of three (3) or more additional effluent analyses to either refute or substantiate the presence of the above toxic pollutant during the Draft Permit comment period. The additional analyses will be evaluated by this Office to determine if the pollutant is potentially in the effluent and if it potentially exceeds the State's water quality standards.

Other Effluent Limitations:

(Effective from the Effective Date of the Permit and Expires on the Expiration Date of the Permit)

1) Fecal Coliform

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

4) Total Residual Chlorine

If chlorination is used to achieve the limitations for Fecal Coliform Bacteria, the effluent shall contain NO MEASURBALE Total Residual Chlorine (TRC) after disinfection and prior to disposal. Given the current constraints pertaining to chlorine analytical methods, No MEASURABLE will be defined as less than 0.1 mg/l of chlorine. Limits set in accordance with

the Water Quality Screen (see Appendix B-1) and the previous LPDES permit.

5) Toxicity Characteristics

In accordance with EPA's Region 6 Post-Third Round Toxics Strategy, permits issued to treatment works treating domestic wastewater with a flow (design or expected) greater than or equal to 1 MGD shall require biomonitoring at some frequency for the life of the permit or where available data show reasonable potential to cause lethality, the permit shall require a whole effluent toxicity (WET) limit (*Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards*, September 27, 2001 VERSION 4).

Whole effluent biomonitoring is the most direct measure of potential toxicity which incorporates the effects of synergism of the effluent components and receiving stream water quality characteristics. Biomonitoring of the effluent is, therefore, required as a condition of this permit to assess potential toxicity. LAC 33:IX.1121.B.3. provides for the use of biomonitoring to monitor the effluent for protection of State waters. The biomonitoring procedures stipulated as a condition of this permit are as follows:

The permittee shall submit the results of any biomonitoring testings performed in accordance with the LPDES Permit No. LA0038822, **Biomonitoring Section** for the organisms indicated below.

TOXICITY TESTS	FREQUENCY
Chronic static renewal 7-day survival & reproduction test using Ceriodaphnia dubia (Method 1002.0)	1/quarter
Chronic static renewal 7-day survival & growth test using fathead minnow (Pimephales promelas) (Method 1000.0)	1/quarter

Dilution Series - The permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests. These additional concentrations shall be 30%, 40%, 54%, 72%, and 96%. The low-flow effluent concentration (critical low-flow dilution) is defined as 96% effluent. The critical dilution is calculated in Appendix B-1 of this fact sheet. Results of all dilutions shall be documented in a full report according to the test method publication mentioned in the **Biomonitoring Section** under Whole Effluent Toxicity. This full report shall be submitted to the Office of Environmental Compliance as contained in the Reporting Paragraph located in the **Biomonitoring Section** of the permit.

The permit may be reopened to require effluent limits, additional testing, and/or other appropriate actions to address toxicity if biomonitoring data show actual or potential ambient toxicity to be the result of the permittee's discharge to the receiving stream or water body. Modification or revocation of the permit is subject to the provisions of LAC 33:IX.2383. Accelerated or intensified toxicity testing may be required in accordance with Section 308 of the Clean Water Act

X. PREVIOUS PERMITS:

LPDES Permit No. LA0038822: Issued: January 1, 2002
Expired: December 31, 2006

Effluent Characteristic	Discharge Limitations Monthly Avg.	Weekly Avg.	Monitoring Requirements Measurement Frequency	Sample Type
Flow	Report	Report	Continuous	Recorder
$CBOD_5$				
April- October	125 lbs/day/ 10 mg/l	15 mg/l	2/week	6 Hr. Comp
November- March	250 lbs/day/ 20 mg/l	30 mg/l	2/week	6 Hr. Comp
TSS				
April- October	188 lbs/day/ 15 mg/l	23 mg/l	2/week	6 Hr. Comp
November- March	250 lbs/day/ 20 mg/l	30 mg/l	2/week	6 Hr. Comp
TRC	<0.1 mg/l daliy max		2/week	Grab
Ammonia-Nitrogen				
April- October	25 lbs/day/ 2 mg/l	4 mg/l	2/week	6 Hr. Comp
November- March	50 lbs/day/ 4 mg/l	8 mg/l	2/week	6 Hr. Comp
Dissolved Oxygen	5 mg/l	---	2/week	Grab
Fecal Coliform				
Colonies per 100ml	200 400		2/week	Grab
	Monthly Avg.	Daily Max		
Total Zinc	1.18 lbs/day	2.8 lbs/day	1/quarter	24 Hr. Comp
Biomonitoring	Monthly Avg. Min.	7 day min.		
Pimephales promelas	Report	Report	1/quarter	24 Hr. Comp.
Ceriodaphnia dubia	Report	Report	1/quarter	24 Hr. Comp.

The permit contains biomonitoring.
The permit contains pollution prevention language.
The permit contains pretreatment language.

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:

A) Inspections

A review of the files indicates the following inspections were performed during the period beginning January 1, 2006 and ending December 31, 2007 for this facility.

Date: March 27, 2006

Inspector: Casey Head
Findings and/or Violations:

1. The permit required a limit for Zinc. The DMR's did not have this limit on it.
2. A DMR check for January 2006 revealed that the wrong limits were recorded on the DMR due to an error on the spreadsheet used for calculating loadings
3. The flow meter has not been calibrated since 7/29/2004. A flow meter check revealed a percent error of 18.
4. The 6 hour composite sample was not being flow proportioned.

Date: May 1, 2007
Inspector: Casey Head
Findings and/or Violations:

1. A flow meter check revealed a percent error of 40.
2. Facility has had sanitary sewer overflows and has not submitted non-compliance reports about the SSO
3. The permit requires a limit for Zinc and on 3rd quarter 2006 the DMR's did not have this limit on it. The DMRs said "report". Weekly Average for Fecal Coliform was not being done as a Geometric mean.
4. Sample date on lab report does not reflect the correct date the CBOD, TSS & NH3-N samples were not collected.
5. TSS mo. average & weekly average were exceeded for July & August 2006.
6. Biomonitoring for 2nd & 3rd quarter failed

B) Compliance and/or Administrative Orders

A review of the files indicates that there are no recent compliance orders administered against this facility.

C) DMR Review

A review of the discharge monitoring reports for the period beginning January 2006 through December 2007 has revealed the following violations:

Parameter	Outfall	Period of Excursion	Permit Limit	Reported Quantity
TSS (weekly average)	001	July 2006	23 mg/l	29.50 mg/l
TSS (weekly average)	001	August 2006	23 mg/l	29.50 mg/l
TSS (weekly average)	001	September 2007	23 mg/l	34.50 mg/l
Ammonia (weekly average)	001	November 2007	4 mg/l	4.15 mg/l

XII. ADDITIONAL INFORMATION:

In accordance with LAC 33:IX.2707.C, this permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(c) and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act, if the effluent standard or limitations so issued or approved:

a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or

b) Controls any pollutant not limited in the permit; or

c) Requires reassessment due to change in 303(d) status of waterbody; or

d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body.

LDEQ reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future. Additional limitations and/or restrictions are based upon water quality studies and can indicate the need for advanced wastewater treatment. Water quality studies of similar dischargers and receiving water bodies have resulted in monthly average effluent limitations of 5mg/L $CBOD_5$ and 2

mg/L NH_3-N. Prior to upgrading or expanding this facility, the permittee should contact LDEQ to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 1.5 MGD.

Effluent loadings are calculated using the following example:

CBOD: 8.34 lb/gal x 1.5 MGD x 10 mg/l = 125 lb/day

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between 1.0 and 5.0 MGD.

Effluent Characteristics	Monitoring Requirements	
	Measurement Frequency	Sample Type
Flow	Continuous	Recorder
$CBOD_5$	2/week	6 Hr. Composite
Total Suspended Solids	2/week	6 Hr. Composite
Ammonia-Nitrogen	2/week	6 Hr. Composite
Dissolved Oxygen	2/week	Grab
Fecal Coliform Bacteria	2/week	Grab
pH	2/week	Grab
Copper	1/quarter	24-hr. Composite
Biomonitoring		
Ceriodaphnia dubia (Method 1002.0)	1/quarter	24 Hr. Composite
Pimephales promelas (Method 1000.0)	1/quarter	24 Hr. Composite

Compliance Schedule

In order to allow the permittee time to upgrade the facility to meet limitations imposed by water quality based limits, **INTERIM LIMITS** are proposed for this facility.

The permittee shall achieve compliance with the FINAL EFFLUENT LIMITATIONS and MONITORING REQUIREMENTS as specified in accordance with the following schedule:

ACTIVITY	DATE
Achieve Interim Effluent Limitations and Monitoring Requirements	On the effective date of the permit
Achieve Final Effluent Limitations and Monitoring Requirements	Three years from the effective date of the permit

The above listed activities must be achieved on or before the deadline date. Additionally, the permittee shall submit a progress report outlining the status of all facility improvements on a yearly basis until compliance is achieved.

Within 14 days of completion of the new facility or facility upgrade and/or expansion, the Permittee shall notify the Department of Environmental Quality-Office of Environmental Services in writing that construction has been completed.

The Permittee shall achieve sustained compliance with Final Effluent Limitations.

Where the percent project completion reported is less than would be required to assure completion of necessary upgrades by the required date, the report of progress shall also include an explanation for this delay and proposed remedial actions.

No later than 14 days following a date for a specific action (as opposed to a report of progress), the permittee shall submit a written notice of compliance or noncompliance.

Pretreatment Requirements

Due to the absence of pretreatment categorical standards for the indirect discharges, it is recommended that LDEQ Option 1 Pretreatment Language be included in LPDES Permit LA0038822.

This language is established for municipalities that do not have either an approved or required Pretreatment program. This recommendation is in accordance with 40 CFR Part 403 regulations, the General Pretreatment Regulations for Existing and New Sources of Pollution contained in LAC Title 33, Part IX, Chapter 61 and the Best Professional Judgement (BPJ) of the reviewer.

Pollution Prevention Requirements

The permittee shall institute or continue programs directed towards pollution prevention. The permittee shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility. The permittee will complete an annual Environmental Audit Report **each year** for the life of this permit according to the schedule below. The permittee will accomplish this requirement by completing an Environmental Audit Form which has been attached to the permit. All other requirements of the Municipal Wastewater Pollution Prevention Program are contained in Part II of the permit.

The audit evaluation period is as follows:

Audit Period Begins	Audit Period Ends	Audit Report Completion Date
Effective Date of Permit	12 Months from Audit Period Beginning Date	3 Months from Audit Period Ending Date

Stormwater Discharges

Because the design flow of the facility is equal to or greater than 1.0 MGD and in accordance with LAC 33:IX.2511.B.14.i, the facility may contain storm water discharges associated with industrial activity. Therefore, in accordance with LAC 33:IX.2511.A.1.b, specific requirements addressing stormwater discharges will be included in the discharge permit.

XIII. TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Fact Sheet.

XIV. REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality

Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

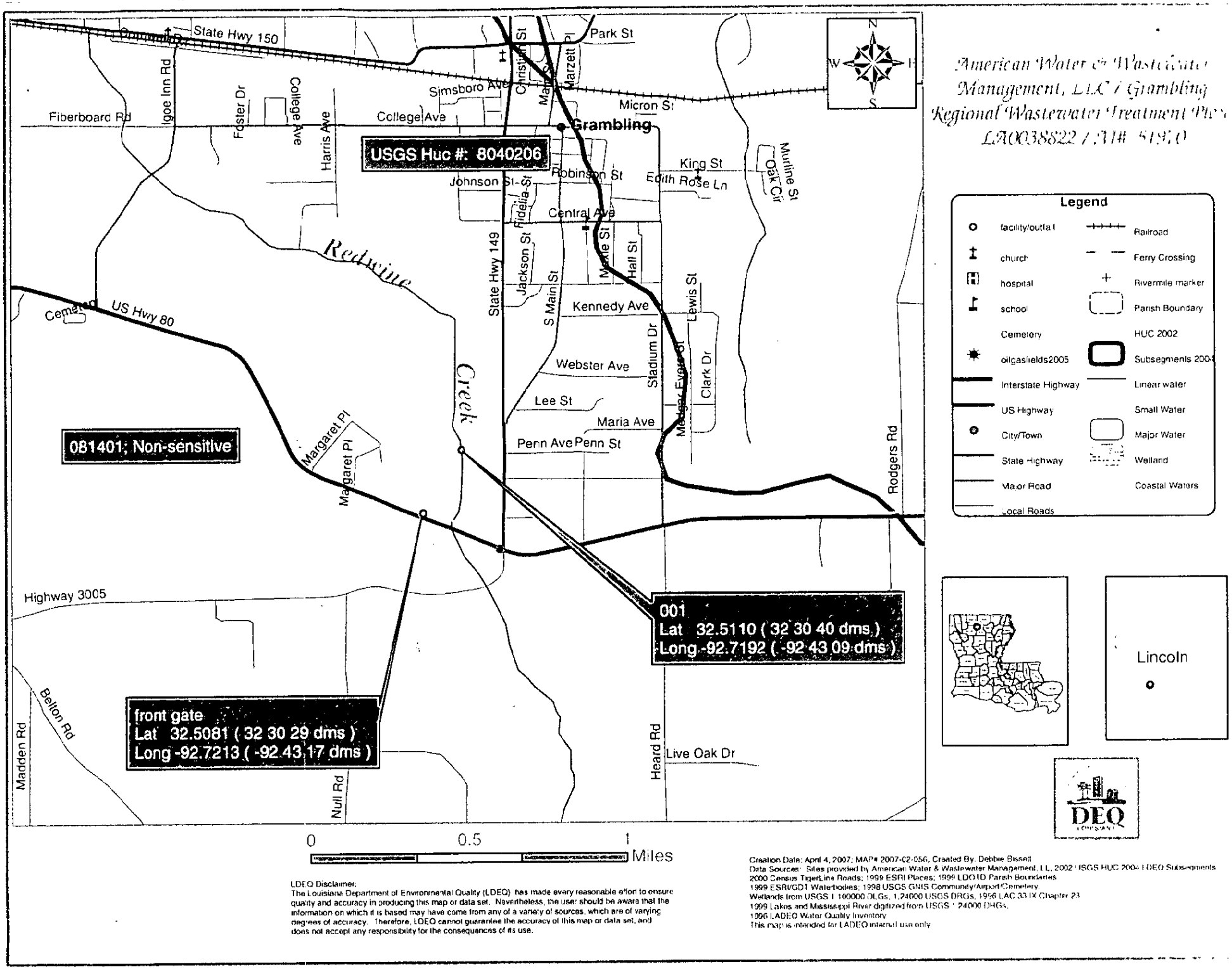
Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, American Water & Wastewater Management, LLC, Grambling Regional Wastewater Treatment Plant, June 21, 2006.



LDEQ Disclaimer:
The Louisiana Department of Environmental Quality (LDEQ) has made every reasonable effort to ensure quality and accuracy in producing this map or data set. Nevertheless, the user should be aware that the information on which it is based may have come from any of a variety of sources, which are of varying degrees of accuracy. Therefore, LDEQ cannot guarantee the accuracy of this map or data set, and does not accept any responsibility for the consequences of its use.

Creation Date: April 4, 2007; MAP# 2007-02-056; Created By: Debbie Bissett
Data Sources: Sites provided by American Water & Wastewater Management, LLC; 2002 USGS HUC 2004 LDEQ Subsegments
2000 Census TigerLine Roads; 1999 ESRI Places; 1999 LDOTD Parish Boundaries
1999 ESRI/GDT Waterbodies; 1998 USGS GNIS Community/Airport/Cemetery
Wetlands from USGS 1:100000 DLGs, 1:24000 USGS DRGs, 1956 LAC 33:IX Chapter 23
1999 Lakes and Mississippi River digitized from USGS 1:24000 DRGs.
1996 LADEQ Water Quality Inventory
This map is intended for LADEQ internal use only

MEMORANDUM

TO: Ronda Burtch

FROM: Will Barlett

DATE: March 13, 2007

RE: Stream Flow and Water Quality Characteristics for Redwine Creek, receiving water for City of Grambling Regional WWTP (Permit No. LA0038822, AI: 51970)

Determinations of water quality characteristics for Outfall 001 were taken from random station #426 at Bridge on Hwy. 504 at Madden Creek in Simsboro, LA. Random station #426 was chosen because it has a similar discharge compared to Redwine Creek. The following results were obtained:

Average hardness	=	28.25 mg/l
15^{th} percentile TSS	=	6.0 mg/l

The 7Q10 at this location has been determined to be 0 cfs and the harmonic mean has been determined to be 0 cfs.

If you have additional questions or comments, please contact me at 2-3468.

WGB: wb

Geo Mean Calculations
American Water & Wastewater / City of Grambling
LA0038822
AI 51970

Zinc
0.08
0.095
0.077
0.07
0.21
0.05
0.119
0.07

GeoMean = 0.087958858

wqsmodn.wk4 Date: 05/19 Appendix B-1 Page 1

Developer: Bruce Fielding Time: 11:00 AM

Software : Lotus 4.0 LA038822 AI# 51970

Revision date: 02/14/05

Water Quality Screen for City of Grambling

Input variables:

Receiving Water Characteristics:		Dilution:	
		ZID Fs =	0.1
Receiving Water Name=	Redwine Creek		
Critical flow (Qr) cfs=	0.1	MZ Fs =	1
Harm. mean/avg tidal cfs=		Critical Qr (MGD)=	0.06463
Drinking Water=1 HHNPCR=2		Harm. Mean (MGD)=	0.06463
Marine, 1=y, 0=n		ZID Dilution =	0.99571
Rec. Water Hardness=	28.25	MZ Dilution =	0.958693
Rec. Water TSS=	0	HHnc Dilution=	0.958693
Fisch/Specific=1,Stream=0		HHc Dilution=	0.958693
Diffuser Ratio=		ZID Upstream =	0.004309
		MZ Upstream =	0.043087
Effluent Characteristics:		MZhhnc Upstream=	0.043087
Permittee=	City of Grambling		
Permit Number=	LA0038822 AI# 51970		
Facility flow (Qef),MGD=	1.5	MZhhc Upstream=	0.043087
		ZID Hardness=	---
Outfall Number =	001	MZ Hardness=	---
Eff. data, 2=lbs/day	2	ZID TSS=	---
MQL, 2=lbs/day	2	MZ TSS=	---
Effluent Hardness=	N/A	Multipliers:	
Effluent TSS=	N/A	WLAa --> LTAa	0.32
WQBL ind, 0=y, 1=n		WLAc --> LTAc	0.53
Acute/Chr. ratio 0=n, 1=y		LTA a,c-->WQBL avg	1.31
Aquatic,acute only1=y,0=n		LTA a,c-->WQBL max	3.31
		LTA h --> WQBL max	2.38
Page Numbering/Labeling		WQBL-limit/report	2.13
Appendix	Appendix B-1	WLA Fraction	1
Page Numbers 1=y, 0=n	1	WQBL Fraction	1
Input Page # 1=y, 0=n	1		
		Conversions:	
Fischer/Site Specific inputs:		ug/L-->lbs/day Qef	0.01251
Pipe=1,Canal=2,Specific=3		ug/L-->lbs/day Qeo	0
Pipe width, feet		ug/L-->lbs/day Qr	0.000834
ZID plume dist., feet		lbs/day-->ug/L Qeo	79.93605
MZ plume dist., feet		lbs/day-->ug/L Qef	79.93605
HHnc plume dist., feet		diss-->tot 1=y0=n	1
HHc plume dist., feet		Cu diss->tot1=y0=n	1
		cfs-->MGD	0.6463
Fischer/site specific dilutions:			
ZID Dilution =	---	Receiving Stream:	
F/specific MZ Dilution =	---	Default Hardness=	25
F/specific HHnc Dilution=	---	Default TSS=	10
F/specific HHc Dilution=	---	99 Crit., 1=y, 0=n	1

Toxicity Dilution Series:

Biomonitoring dilution:	0.958693
Dilution Series Factor:	0.75

	Percent Effluent
Dilution No. 1	95.869%
Dilution No. 2	71.9020%
Dilution No. 3	53.9265%
Dilution No. 4	40.4449%
Dilution No. 5	30.3336%

Partition Coefficients: Dissolved-->Total

METALS	FW
Total Arsenic	1.77865
Total Cadmium	4.16884
Chromium III	4.80899
Chromium VI	1
Total Copper	2.657115
Total Lead	5.006713
Total Mercury	3.256612
Total Nickel	2.058769
Total Zinc	3.139712

Aquatic Life, Dissolved Metal Criteria, ug/L

METALS	ACUTE	CHRONIC
Arsenic	339.8	150
Cadmium	8.070665	0.404367
Chromium III	194.8719	63.21443
Chromium VI	15.712	10.582
Copper	5.599942	4.170944
Lead	15.92821	0.620699
Mercury	1.734	0.012
Nickel	485.7835	53.95015
Zinc	39.21514	35.80937

Site Specific Multiplier Values:

CV =	---
N =	---
WLAa --> LTAa	---
WLAc --> LTAc	---
LTA a,c-->WQBL avg	---
LTA a,c-->WQBL max	---
LTA h --> WQBL max	---

(*1) Toxic Parameters	(*2) Cu`Effluent Instream Conc. ug/L	(*3) /Tech (Avg) lbs/day	(*4) Effluent /Tech (Max) lbs/day	(*5) MQL lbs/day	(*6) Effluent 1=No 95% 0=95 %	(*7) 95th % estimate Non-Tech lbs/day	(*8) Numerical Criteria Acute FW ug/L	(*9) Chronic FW ug/L	(*10) HHNDW ug/L	(*11) HH Carcinogen Indicator "C"
NONCONVENTIONAL										
Total Phenols (4AAP)				0.06255			700	350	50	
3-Chlorophenol				0.1251						
4-Chlorophenol				0.1251			383	192		
2,3-Dichlorophenol				0.1251						
2,5-Dichlorophenol				0.1251						
2,6-Dichlorophenol				0.1251						
3,4-Dichlorophenol				0.1251						
2,4-Dichlorophenocy-acetic acid (2,4-D)				---						
2-(2,4,5-Trichlorophen-oxy) propionic acid (2,4,5-TP, Silvex)				---						
METALS AND CYANIDE										
Total Arsenic				0.1251			604.3851	266.7974		
Total Cadmium				0.01251			33.64531	1.685743		
Chromium III				0.1251			937.1371	303.9976		
Chromium VI				0.1251			15.712	10.582		
Total Copper				0.1251			14.87969	11.08268		
Total Lead				0.06255			79.74798	3.107664		
Total Mercury				0.002502			5.646965	0.039079		
Total Nickel				0.5004			1000.116	111.0709		
Total Zinc		**0.088**		**0.2502**	**0**	**0.18744**	**123.1243**	**112.4311**		
Total Cyanide				0.2502			45.9	5.4	12844	
DIOXIN										
2,3,7,8 TCDD, dioxin				1.3E-07					7.2E-07	C
VOLATILE COMPOUNDS										
Benzene				0.1251			2249	1125	12.5	C
Bromoform				0.1251			2930	1465	34.7	C
Bromodichloromethane				0.1251					3.3	C
Carbon Tetrachloride				0.1251			2730	1365	1.2	C
Chloroform				**0.1251**			**2890**	**1445**	**70**	**C**
Dibromochloromethane				0.1251					5.08	C
1,2-Dichloroethane				0.1251			11800	5900	6.8	C
1,1-Dichloroethylene				0.1251			1160	580	0.58	C
1,3-Dichloropropylene				0.1251			606	303	162.79	
Ethylbenzene				0.1251			3200	1600	8100	
Methyl Chloride				0.6255			55000	27500		
Methylene Chloride				0.2502			19300	9650	87	C
1,1,2,2-Tetrachloro-ethane				0.1251			932	466	1.8	C

Appendix B-1 Page 3
City of Grambling
LA0038822 AI# 51970

(*1) Toxic Parameters	(*12) WLAa Acute	(*13) WLAc Chronic	(*14) WLAh HHNDW	(*15) LTAa Acute	(*16) LTAc Chronic	(*17) LTAh HHNDW	(*18) Limiting A,C,HH	(*19) WQBL Avg 001	(*20) WQBL Max 001	(*21) WQBL Avg 001	(*22) WQBL Max 001	(*23) Need WQBL
	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	lbs/day	lbs/day	
NONCONVENTIONAL												
Total Phenols (4AAP)	703.0161	365.0803	52.15433	224.9651	193.4926	52.15433	52.15433	52.15433	124.1273	0.652451	1.552833	no
3-Chlorophenol	---	---	---	---	---	---	---	---	---	---	---	no
4-Chlorophenol	384.6502	200.2726	---	123.0881	106.1445	---	106.1445	159.0495	330.1094	1.739507	4.129669	no
2,3-Dichlorophenol	---	---	---	---	---	---	---	---	---	---	---	no
2,5 Dichlorophenol	---	---	---	---	---	---	---	---	---	---	---	no
2,6-Dichlorophenol	---	---	---	---	---	---	---	---	---	---	---	no
3,4-Dichlorophenol	---	---	---	---	---	---	---	---	---	---	---	no
2,4-Dichlorophenocy-acetic acid (2,4-D)	---	---	---	---	---	---	---	---	---	---	---	no
2-(2,4,5-Trichlorophen-oxy) propionic acid (2,4,5-TP, Silvex)	---	---	---	---	---	---	---	---	---	---	---	no
METALS AND CYANIDE												
Total Arsenic	606.9892	278.2929	---	194.2366	147.4952	---	147.4952	193.2187	458.7101	2.417166	5.738464	no
Total Cadmium	33.79028	1.758376	---	10.81289	0.931939	---	0.931939	1.220841	2.898331	0.015273	0.036258	no
Chromium III	941.1749	317.0958	---	301.176	168.0608	---	168.0608	220.1596	522.6691	2.754197	6.53859	no
Chromium VI	15.7797	11.03794	---	5.049503	5.85011	---	5.049503	6.614849	15.70396	0.082752	0.196456	no
Total Copper	14.9438	11.56019	---	4.782017	6.126903	---	4.782017	6.264442	14.87207	0.078368	0.18605	no
Total Lead	80.09158	3.241563	---	25.62931	1.718028	---	1.718028	2.250617	5.343068	0.028155	0.066842	no
Total Mercury	5.671295	0.040763	---	1.814815	0.021604	---	0.021604	0.028302	0.06719	0.000354	0.000841	no
Total Nickel	1004.425	115.8566	---	321.416	61.40398	---	61.40398	80.43921	190.9664	1.006295	2.388989	no
Total Zinc	**123.6548**	**117.2754**	---	**39.56952**	**62.15596**	---	**39.56952**	**51.83607**	**123.0612**	**0.648469**	**1.539496**	**no**
Total Cyanide	46.09777	5.632668	13397.41	14.75129	2.985314	13397.41	2.985314	3.910761	9.284327	0.048924	0.116147	no
DIOXIN												
2,3,7,8 TCDD; dioxin	---	---	7.51E-07	---	---	7.51E-07	7.51E-07	7.51E-07	1.79E-06	9.4E-09	2.24E-08	no
VOLATILE COMPOUNDS												
Benzene	2258.69	1173.473	13.03858	722.7809	621.9404	13.03858	13.03858	13.03858	31.03183	0.163113	0.388208	no
Bromoform	2942.624	1528.122	36.19511	941.6398	809.9046	36.19511	36.19511	36.19511	86.14436	0.452801	1.077666	no
Bromodichloromethane	---	---	3.442186	---	---	3.442186	3.442186	3.442186	8.192403	0.043062	0.102487	no
Carbon Tetrachloride	2741.763	1423.813	1.251704	877.3641	754.621	1.251704	1.251704	1.251704	2.979056	0.015659	0.037268	no
Chloroform	**2902.452**	**1507.26**	**73.01607**	**928.7847**	**798.8479**	**73.01607**	**73.01607**	**73.01607**	**173.7782**	**0.913431**	**2.173966**	**no**
Dibromochloromethane	---	---	5.29888	---	---	5.29888	5.29888	5.29888	12.61134	0.066289	0.157768	no
1,2-Dichloroethane	11850.84	6154.211	7.092989	3792.27	3261.732	7.092989	7.092989	7.092989	16.88131	0.088733	0.211185	no
1,1-Dichloroethylene	1164.998	604.9903	0.60499	372.7994	320.6448	0.60499	0.60499	0.60499	1.439877	0.007568	0.018013	no
1,3-Dichloropropylene	608.6111	316.0553	169.8041	194.7555	167.5093	169.8041	167.5093	219.4372	520.9539	2.745159	6.517133	no
Ethylbenzene	3213.788	1668.939	8449.002	1028.412	884.5375	8449.002	884.5375	1158.744	2750.912	14.49589	34.4139	no
Methyl Chloride	55236.98	28684.88	---	17675.83	15202.99	---	15202.99	19915.91	47281.29	249.1481	591.489	no
Methylene Chloride	19383.16	10065.79	90.74854	6202.61	5334.867	90.74854	90.74854	90.74854	215.9815	1.135264	2.701929	no
1,1,2,2-Tetrachloro-ethane	936.0157	486.0784	1.877556	299.525	257.6215	1.877556	1.877556	1.877556	4.468583	0.023488	0.055902	no

(*1) Toxic Parameters	(*2) Cu Instream Conc. ug/L	(*3) Effluent /Tech (Avg) lbs/day	(*4) Effluent /Tech (Max) lbs/day	(*5) MQL lbs/day	(*6) Effluent 1=No 95% 0=95 %	(*7) 95th % estimate Non-Tech lbs/day	(*8) Numerical Criteria Acute FW ug/L	(*9) Chronic FW ug/L	(*10) HHNDW ug/L	(*11) HH Carcinogen Indicator "C"
VOLATILE COMPOUNDS (cont'd)										
Tetrachloroethylene				0.1251			1290	645	2.5	C
Toluene				0.1251			1270	635	46200	
1,1,1-Trichloroethane				0.1251			5280	2640		
1,1,2-Trichloroethane				0.1251			1800	900	6.9	C
Trichloroethylene				0.1251			3900	1950	21	C
Vinyl Chloride				0.1251					35.8	C
ACID COMPOUNDS										
2-Chlorophenol				0.1251			258	129	126.4	
2,4-Dichlorophenol				0.1251			202	101	232.6	
BASE NEUTRAL COMPOUNDS										
Benzidine				0.6255			250	125	0.00017	C
Hexachlorobenzene				0.1251					0.00025	C
Hexachlorabutadiene				0.1251			5.1	1.02	0.11	C
PESTICIDES										
Aldrin				0.000626			3		0.0004	C
Hexachlorocyclohexane (gamma BHC, Lindane)				0.000626			5.3	0.21	0.2	C
Chlordane				0.002502			2.4	0.0043	0.00019	C
4,4'-DDT				0.001251			1.1	0.001	0.00019	C
4,4'-DDE				0.001251			52.5	10.5	0.00019	C
4,4'-DDD				0.001251			0.03	0.006	0.00027	C
Dieldrin				0.001251			0.2374	0.0557	0.00005	C
Endosulfan				0.001251			0.22	0.056	0.64	
Endrin				0.001251			0.0864	0.0375	0.76	
Heptachlor				0.000626			0.52	0.0038	0.00007	C
Toxaphene				0.06255			0.73	0.0002	0.00024	C
Other Parameters:										
Fecal Col.(col/100ml)										
Chlorine							19	11		
Ammonia								4000		
Chlorides										
Sulfates										
TDS										

(*1) Toxic Parameters	(*12) WLAa Acute	(*13) WLAc Chronic	(*14) WLAh HHNDW	(*15) LTAa Acute	(*16) LTAc Chronic	(*17) LTAh HHNDW	(*18) Limiting A,C,HH	(*19) WQBL Avg 001	(*20) WQBL Max 001	(*21) WQBL Avg 001	(*22) WQBL Max 001	(*23) Need WQBL
	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	lbs/day	lbs/day	
Tetrachloroethylene	1295.558	672.7909	2.607717	414.5786	356.5792	2.607717	2.607717	2.607717	6.206366	0.032623	0.077642	no
Toluene	1275.472	662.36	48190.6	408.151	351.0508	48190.6	351.0508	459.8766	1091.768	5.753056	13.65802	no
1,1,1-Trichloroethane	5302.75	2753.749	---	1696.88	1459.487	---	1459.487	1911.928	4539.004	23.91822	56.78294	no
1,1,2-Trichloroethane	1807.756	938.778	7.197298	578.4818	497.5523	7.197298	7.197298	7.197298	17.12957	0.090038	0.214291	no
Trichloroethylene	3916.804	2034.019	21.90482	1253.377	1078.03	21.90482	21.90482	21.90482	52.13347	0.274029	0.65219	no
Vinyl Chloride	---	---	37.3425	---	---	37.3425	37.3425	37.3425	88.87516	0.467155	1.111828	no
ACID COMPOUNDS												
2-Chlorophenol	259.1116	134.5582	131.8462	82.91572	71.31584	131.8462	71.31584	93.42374	221.7922	1.168731	2.774621	no
2,4-Dichlorophenol	202.8704	105.3518	242.622	64.91851	55.83643	242.622	55.83643	73.14572	173.6513	0.915053	2.172378	no
BASE NEUTRAL COMPOUNDS												
Benzidine	251.0772	130.3858	0.000177	80.34469	69.10449	0.000177	0.000177	0.000177	0.000422	2.22E-06	5.28E-06	no
Hexachlorobenzene	---	---	0.000261	---	---	0.000261	0.000261	0.000261	0.000621	3.26E-06	7.76E-06	no
Hexachlorabutadiene	5.121974	1.063948	0.11474	1.639032	0.563893	0.11474	0.11474	0.11474	0.27308	0.001435	0.003416	no
PESTICIDES												
Aldrin	3.012926	---	0.000417	0.964136	---	0.000417	0.000417	0.000417	0.000993	5.22E-06	1.24E-05	no
Hexachlorocyclohexane (gamma BHC, Lindane)	5.322836	0.219048	0.208617	1.703307	0.116096	0.208617	0.116096	0.152085	0.361057	0.001903	0.004517	no
Chlordane	2.410341	0.004485	0.000198	0.771309	0.002377	0.000198	0.000198	0.000198	0.000472	2.48E-06	5.9E-06	no
4,4'-DDT	1.10474	0.001043	0.000198	0.353517	0.000553	0.000198	0.000198	0.000198	0.000472	2.48E-06	5.9E-06	no
4,4'-DDE	52.72621	10.95241	0.000198	16.87239	5.804777	0.000198	0.000198	0.000198	0.000472	2.48E-06	5.9E-06	no
4,4'-DDD	0.030129	0.006259	0.000282	0.009641	0.003317	0.000282	0.000282	0.000282	0.00067	3.52E-06	8.39E-06	no
Dieldrin	0.238423	0.0581	5.22E-05	0.076295	0.030793	5.22E-05	5.22E-05	5.22E-05	0.000124	6.52E-07	1.55E-06	no
Endosulfan	0.220948	0.058413	0.667575	0.070703	0.030959	0.667575	0.030959	0.040556	0.096282	0.000507	0.001204	no
Endrin	0.086772	0.039116	0.271203	0.027767	0.020731	0.271203	0.020731	0.027158	0.064474	0.00034	0.000807	no
Heptachlor	0.522241	0.003964	7.3E-05	0.167117	0.002101	7.3E-05	7.3E-05	7.3E-05	0.000174	9.13E-07	2.17E-06	no
Toxaphene	0.733145	0.000209	0.00025	0.234607	0.000111	0.00025	0.000111	0.000145	0.000344	1.81E-06	4.3E-06	no
Other Parameters:												
Fecal Col.(col/100ml)	---	---	---	---	---	---	---	---	---	---	---	no
Chlorine	19.08186	11.47395	---	6.106197	6.081195	---	6.081195	7.966366	18.91252	0.099659	0.236596	no
Ammonia	---	4172.347	---	---	2211.344	---	2211.344	2896.86	6877.279	36.23972	86.03476	no
Chlorides	---	---	---	---	---	---	---	---	---	---	---	no
Sulfates	---	---	---	---	---	---	---	---	---	---	---	no
TDS	---	---	---	---	---	---	---	---	---	---	---	no
	---	---	---	---	---	---	---	---	---	---	---	no
	---	---	---	---	---	---	---	---	---	---	---	no

wqamodn.wk4 Date: 03/19 Appendix B-1 Page 1
Developer: Bruce Fielding Time: 10:55 AM
Software v. Lotus 4.0 LA0038822 AI# 51970
Revision date: 02/14/05

Water Quality Screen for City of Grambling

Input variables:

Receiving Water Characteristics:		Dilution:	
		ZID Fs =	0.1
Receiving Water Name=	Redwine Creek		
Critical flow (Qr) cfs=	0.1	MZ Fs =	1
Harm. mean/avg tidal cfs=		Critical Qr (MGD)=	0.06463
Drinking Water=1 HHNPCR=2		Harm. Mean (MGD)=	0.06463
Marine, 1=y, 0=n		ZID Dilution =	0.99571
Rec. Water Hardness=	28.25	MZ Dilution =	0.958693
Rec. Water TSS=	6	HHnc Dilution=	0.958693
Fisch/Specific=1,Stream=0		HHc Dilution=	0.958693
Diffuser Ratio=		ZID Upstream =	0.004309
		MZ Upstream =	0.043087
Effluent Characteristics:		MZhhnc Upstream=	0.043087
Permittee=	City of Grambling		
Permit Number=	LA0038822 AI# 51970		
Facility flow (Qef),MGD=	1.5	MZhhc Upstream=	0.043087
		ZID Hardness=	---
Outfall Number =	001	MZ Hardness=	---
Eff. data, 2=lbs/day		ZID TSS=	---
MQL, 2=lbs/day		MZ TSS=	---
Effluent Hardness=	N/A	Multipliers:	
Effluent TSS=	N/A	WLAa --> LTAa	0.32
WQBL ind, 0=y, 1=n		WLAc --> LTAc	0.53
Acute/Chr ratio 0=n, 1=y		LTA a,c-->WQBL avg	1.31
Aquatic,acute only1=y,0=n		LTA a,c-->WQBL max	3.11
		LTA h --> WQBL max	2.38
Page Numbering/Labeling		WQBL-limit/report	2.13
Appendix	Appendix B-1	WLA Fraction	1
Page Numbers 1=y, 0=n	1	WQBL Fraction	1
Input Page # 1=y, 0=n	1		
		Conversions:	
Fischer/Site Specific inputs:		ug/L-->lbs/day Qef	0.01251
Pipe=1,Canal=2,Specific=3		ug/L-->lbs/day Qeo	0
Pipe width, feet		ug/L-->lbs/day Qr	0.000834
ZID plume dist., feet		lbs/day-->ug/L Qeo	79.93605
MZ plume dist., feet		lbs/day-->ug/L Qef	79.93605
HHnc plume dist., feet		diss-->tot 1=y0=n	1
HHc plume dist., feet		Cu diss->tot1=y0=n	1
		cfs-->MGD	0.6463
Fischer/site specific dilutions:			
) Dilution =	---	Receiving Stream:	
F/specific MZ Dilution =	---	Default Hardness=	25
F/specific HHnc Dilution=	---	Default TSS=	10
F/specific HHc Dilution=	---	99 Crit., 1=y, 0=n	1

Toxicity Dilution Series:

Biomonitoring dilution:	0.958693
Dilution Series Factor:	0.75

	Percent Effluent
Dilution No. 1	95.869%
Dilution No. 2	71.9020%
Dilution No. 3	53.9265%
Dilution No. 4	40.4449%
Dilution No. 5	30.3336%

Partition Coefficients; Dissolved-->Total

METALS	FW
Total Arsenic	1.77865
Total Cadmium	4.16884
Chromium III	4.80899
Chromium VI	1
Total Copper	2.657115
Total Lead	5.006713
Total Mercury	3.256612
Total Nickel	2.058769
Total Zinc	3.139712

Aquatic Life, Dissolved Metal Criteria, ug/L

METALS	ACUTE	CHRONIC
Arsenic	339.8	150
Cadmium	8.070665	0.404367
Chromium III	194.8719	63.21443
Chromium VI	15.712	10.582
Copper	5.599942	4.170944
Lead	15.92821	0.620699
Mercury	1.734	0.012
Nickel	485.7835	53.95015
Zinc	39.21514	35.80937

Site Specific Multiplier Values:

CV =	---
N =	---
WLAa --> LTAa	---
WLAc --> LTAc	---
LTA a,c-->WQBL avg	---
LTA a,c-->WQBL max	---
LTA h --> WQBL max	---

(*1) Toxic Parameters	(*2) Cu Instream Conc. ug/L	(*3) Effluent /Tech (Avg) ug/L	(*4) Effluent /Tech (Max) ug/L	(*5) MQL ug/L	(*6) Effluent 1=No 95% 0=95 %	(*7) 95th % estimate Non-Tech ug/L	(*8) Numerical Criteria Acute FW ug/L	(*9) Chronic FW ug/L	(*10) HHNDW ug/L	(*11) HH Carcinogen Indicator "C"
NONCONVENTIONAL										
Total Phenols (4AAP)				5			700	350	50	
3-Chlorophenol				10						
4-Chlorophenol				10			383	192		
2,3-Dichlorophenol				10						
2,5-Dichlorophenol				10						
2,6-Dichlorophenol				10						
3,4-Dichlorophenol				10						
2,4-Dichlorophenocy-acetic acid (2,4-D)				---						
2-(2,4,5-Trichlorophen-oxy) propionic acid (2,4,5-TP Silvex)				---						
METALS AND CYANIDE										
Total Arsenic		**22**		**10**	**0**	**46.86**	**604.3851**	**266.7974**		
Total Cadmium				1			33.64531	1.685743		
Chromium III				10			937.1371	303.9976		
Chromium VI				10			15.712	10.582		
Total Copper		**19.9**		**10**	**0**	**42.387**	**14.87969**	**11.08268**		
Total Lead				5			79.74798	3.107664		
Total Mercury				0.2			5.646965	0.039079		
Total Nickel				40			1000.116	111.0709		
Total Zinc		**23.5**		**20**	**0**	**50.055**	**123.1243**	**112.4311**		
Total Cyanide				20			45.9	5.4	12844	
DIOXIN										
2,3,7,8 TCDD: dioxin				1.0E-05					7.2E-07	C
VOLATILE COMPOUNDS										
Benzene				10			2249	1125	12.5	C
Bromoform				10			2930	1465	34.7	C
Bromodichloromethane				10					3.3	C
Carbon Tetrachloride				10			2730	1365	1.2	C
Chloroform		**20**		**10**	**0**	**42.6**	**2890**	**1445**	**.70**	C
Dibromochloromethane				10					5.08	C
1,2-Dichloroethane				10			11800	5900	6.8	C
1,1-Dichloroethylene				10			1160	580	0.58	C
1,3-Dichloropropylene				10			606	303	162.79	
Ethylbenzene				10			3200	1600	8100	
Methyl Chloride				50			55000	27500		
Methylene Chloride				20			19300	9650	87	C
1,1,2,2-Tetrachloro-ethane				10			932	466	1.8	C

(*1) Toxic Parameters	(*12) WLAa Acute	(*13) WLAc Chronic	(*14) WLAh HHNDW	(*15) LTAa Acute	(*16) LTAc Chronic	(*17) LTAh HHNDW	(*18) Limiting A,C,HH	(*19) WQBL Avg 001	(*20) WQBL Max 001	(*21) WQBL Avg 001	(*22) WQBL Max 001	(*23) Need WQBL
	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	lbs/day	lbs/day	
NONCONVENTIONAL												
Total Phenols (4AAP)	703.0161	365.0803	52.15433	224.9651	193.4926	52.15433	52.15433	52.15433	124.1273	0.652451	1.552833	no
3-Chlorophenol	---	---	---	---	---	---	---	---	---	---	---	no
4-Chlorophenol	384.6502	200.2726	---	123.0881	106.1445	---	106.1445	139.0493	330.1094	1.739507	4.129669	no
2,3-Dichlorophenol	---	---	---	---	---	---	---	---	---	---	---	no
2,5-Dichlorophenol	---	---	---	---	---	---	---	---	---	---	---	no
2,6-Dichlorophenol	---	---	---	---	---	---	---	---	---	---	---	no
3,4-Dichlorophenol	---	---	---	---	---	---	---	---	---	---	---	no
2,4-Dichlorophenocy-acetic acid (2,4-D)	--	--	---	---	---	---	--	--	---	--	---	no
2-(2,4,5-Trichlorophen-oxy) propionic acid (2,4,5-TP, Silvex)	---	---	---	---	---	---	---	---	---	---	---	no
METALS AND CYANIDE												
Total Arsenic	**606.9892**	**278.2929**	**—**	**194.2366**	**147.4952**	**—**	**147.4952**	**193.2187**	**458.7101**	**2.417166**	**5.738464**	**no**
Total Cadmium	33.79028	1.758376	---	10.81289	0.931939	---	0.931939	1.220841	2.898331	0.015273	0.036258	no
Chromium III	941.1749	317.0958	---	301.176	168.0608	---	168.0608	220.1596	522.6691	2.754197	6.53859	no
Chromium VI	15.7797	11.03794	---	5.049503	5.85011	---	5.049503	6.614849	15.70396	0.082752	0.196456	no
Total Copper	**14.9438**	**11.56019**	**—**	**4.782017**	**6.126903**	**—**	**4.782017**	**6.264442**	**14.87207**	**0.078368**	**0.18605**	**yes**
Total Lead	80.09158	3.241563	---	25.62931	1.718028	---	1.718028	2.250617	5.343068	0.028155	0.066842	no
Total Mercury	5.671295	0.040763	---	1.814815	0.021604	---	0.021604	0.028302	0.06719	0.000354	0.000841	no
Total Nickel	1004.425	115.8566	---	321.416	61.40398	---	61.40398	80.43921	190.9664	1.006295	2.388989	no
Total Zinc	**123.6548**	**117.2754**	**—**	**39.56952**	**62.15596**	**—**	**39.56952**	**51.83607**	**123.0612**	**0.648469**	**1.539496**	**no**
Total Cyanide	46.09777	5.632668	13397.41	14.75129	2.985314	13397.41	2.985314	3.910761	9.284327	0.048924	0.116147	no
DIOXIN												
2,3,7,8 TCDD: dioxin	---	---	7.51E-07	---	---	7.51E-07	7.51E-07	7.51E-07	1.79E-06	9.4E-09	2.24E-08	no
VOLATILE COMPOUNDS												
Benzene	2258.69	1173.473	13.03858	722.7809	621.9404	13.03858	13.03858	13.03858	31.03183	0.163113	0.388208	no
Bromoform	2942.624	1528.122	36.19511	941.6398	809.9046	36.19511	36.19511	36.19511	86.14436	0.452801	1.077666	no
Bromodichloromethane	---	---	3.442186	---	---	3.442186	3.442186	3.442186	8.192403	0.043062	0.102487	no
Carbon Tetrachloride	2741.763	1423.813	1.251704	877.3641	754.621	1.251704	1.251704	1.251704	2.979056	0.015659	0.037268	no
Chloroform	**2902.452**	**1507.26**	**73.01607**	**928.7847**	**798.8479**	**73.01607**	**73.01607**	**73.01607**	**173.7782**	**0.913431**	**2.173966**	**no**
Dibromochloromethane	---	---	5.29888	---	---	5.29888	5.29888	5.29888	12.61134	0.066289	0.157768	no
1,2 Dichloroethane	11850.84	6154.211	7.092989	3792.27	3261.732	7.092989	7.092989	7.092989	16.88131	0.088733	0.211185	no
1,1-Dichloroethylene	1164.998	604.9903	0.60499	372.7994	320.6448	0.60499	0.60499	0.60499	1.439877	0.007568	0.018013	no
1,3-Dichloropropylene	608.6111	316.0553	169.8041	194.7555	167.5093	169.8041	167.5093	219.4372	520.9539	2.745159	6.517133	no
Ethylbenzene	3213.788	1668.939	8449.002	1028.412	884.5375	8449.002	884.5375	1158.744	2750.912	14.49589	34.4139	no
Methyl Chloride	55236.98	28684.88	---	17675.83	15202.99	---	15202.99	19915.91	47281.29	249.1481	591.489	no
Methylene Chloride	19383.16	10065.79	90.74854	6202.61	5334.867	90.74854	90.74854	90.74854	215.9815	1.135264	2.701929	no
1,1,2,2-Tetrachloro-ethane	936.0157	486.0784	1.877556	299.525	257.6215	1.877556	1.877556	1.877556	4.468583	0.023488	0.055902	no

(*1) Toxic Parameters	(*2) Cu Instream Conc. ug/L	(*3) Effluent /Tech (Avg) ug/L	(*4) Effluent /Tech (Max) ug/L	(*5) MQL ug/L	(*6) Effluent 1=No 95% 0=95 %	(*7) 95th % estimate Non-Tech ug/L	(*8) Numerical Criteria Acute FW ug/L	(*9) Chronic FW ug/L	(*10) HHNDW ug/L	(*11) HH Carcinogen Indicator "C"
VOLATILE COMPOUNDS (cont'd)										
Tetrachloroethylene				10			1290	645	2.5	C
Toluene				10			1270	635	46200	
1,1,1-Trichloroethane				10			5280	2640		
1,1,2-Trichloroethane				10			1800	900	6.9	C
Trichloroethylene				10			3900	1950	21	C
Vinyl Chloride				10					35.8	C
ACID COMPOUNDS										
2-Chlorophenol				10			258	129	126.4	
2,4-Dichlorophenol				10			202	101	232.6	
BASE NEUTRAL COMPOUNDS										
Benzidine				50			250	125	0.00017	C
Hexachlorobenzene				10					0.00025	C
Hexachlorabutadiene				10			5.1	1.02	0.11	C
PESTICIDES										
Aldrin				0.05			3		0.0004	C
Hexachlorocyclohexane (gamma BHC, Lindane)				0.05			5.3	0.21	0.2	C
Chlordane				0.2			2.4	0.0043	0.00019	C
4,4'-DDT				0.1			1.1	0.001	0.00019	C
4,4'-DDE				0.1			52.5	10.5	0.00019	C
4,4'-DDD				0.1			0.03	0.006	0.00027	C
Dieldrin				0.1			0.2374	0.0557	0.00005	C
Endosulfan				0.1			0.22	0.056	0.64	
Endrin				0.1			0.0864	0.0375	0.26	
Heptachlor				0.05			0.52	0.0038	0.00007	C
Toxaphene				5			0.73	0.0002	0.00024	C
Other Parameters:										
Fecal Col.(col/100ml)										
Chlorine		**20**			**0**	**42.6**	**19**	**11**		
Ammonia								4000		
Chlorides										
Sulfates										
TDS										

(*1)	(*12)	(*13)	(*14)	(*15)	(*16)	(*17)	(*18)	(*19)	(*20)	(*21)	(*22)	(*23)
Toxic	WLAa	WLAc	WLAh	LTAa	LTAc	LTAh	Limiting	WQBL	WQBL	WQBL	WQBL	Need
Parameters	Acute	Chronic	HHNDW	Acute	Chronic	HHNDW	A,C,HH	Avg	Max	Avg	Max	WQBL
								001	001	001	001	
	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	lbs/day	lbs/day	
Tetrachloroethylene	1295.558	672.7909	2.607717	414.5786	356.5792	2.607717	2.607717	2.607717	6.206366	0.032623	0.077642	no
Toluene	1275.472	662.36	48190.6	408.151	351.0508	48190.6	351.0508	459.8766	1091.768	5.753056	13.65802	no
1,1,1-Trichloroethane	5302.75	2753.749	---	1696.88	1459.487	---	1459.487	1911.928	4539.004	23.91822	56.78294	no
1,1,2-Trichloroethane	1807.756	938.778	7.197298	578.4818	497.5523	7.197298	7.197298	7.197298	17.12957	0.090038	0.214291	no
Trichloroethylene	3916.804	2034.019	21.90482	1253.377	1078.03	21.90482	21.90482	21.90482	52.13347	0.274029	0.65219	no
Vinyl Chloride	---	---	37.3425	---	---	37.3425	37.3425	37.3425	88.87516	0.467155	1.111828	no
ACID COMPOUNDS												
2-Chlorophenol	259.1116	134.5582	131.8462	82.91572	71.31584	131.8462	71.31584	93.42374	221.7922	1.168731	2.774621	no
2,4-Dichlorophenol	202.8704	105.3518	242.622	64.91851	55.83643	242.622	55.83643	73.14572	173.6513	0.915053	2.172378	no
BASE NEUTRAL COMPOUNDS												
Benzidine	251.0772	130.3858	0.000177	80.34469	69.10449	0.000177	0.000177	0.000177	0.000422	2.22E-06	5.28E-06	no
Hexachlorobenzene	---	---	0.000261	---	---	0.000261	0.000261	0.000261	0.000621	3.26E-06	7.76E-06	no
Hexachlorabutadiene	5.121974	1.063948	0.11474	1.639032	0.563893	0.11474	0.11474	0.11474	0.27308	0.001435	0.003416	no
PESTICIDES												
Aldrin	3.012926	---	0.000417	0.964136	---	0.000417	0.000417	0.000417	0.000993	5.22E-06	1.24E-05	no
Hexachlorocyclohexane												
(gamma BHC, Lindane)	5.322836	0.219048	0.208617	1.703307	0.116096	0.208617	0.116096	0.152085	0.361057	0.001903	0.004517	no
Chlordane	2.410341	0.004485	0.000198	0.771309	0.002577	0.000198	0.000198	0.000198	0.000472	2.48E-06	5.9E-06	no
4,4'-DDT	1.10474	0.001043	0.000198	0.353517	0.000553	0.000198	0.000198	0.000198	0.000472	2.48E-06	5.9E-06	no
4,4'-DDE	52.72621	10.95241	0.000198	16.87239	5.804777	0.000198	0.000198	0.000198	0.000472	2.48E-06	5.9E-06	no
4,4'-DDD	0.030129	0.006259	0.000282	0.009641	0.003317	0.000282	0.000282	0.000282	0.00067	3.52E-06	8.39E-06	no
Dieldrin	0.238423	0.0581	5.22E-05	0.076295	0.030793	5.22E-05	5.22E-05	5.22E-05	0.000124	6.52E-07	1.55E-06	no
Endosulfan	0.220948	0.058413	0.667575	0.070703	0.030959	0.667575	0.030959	0.010556	0.096282	0.000507	0.001204	no
Endrin	0.086772	0.039116	0.271203	0.027767	0.020731	0.271203	0.020731	0.027158	0.064474	0.00034	0.000807	no
Heptachlor	0.522241	0.003964	7.3E-05	0.167117	0.002101	7.3E-05	7.3E-05	7.3E-05	0.000174	9.13E-07	2.17E-06	no
Toxaphene	0.733145	0.000209	0.00025	0.234607	0.000111	0.00025	0.000111	0.000145	0.000344	1.81E-06	4.3E-06	no
Other Parameters:												
Fecal Col.(col/100ml)	---	---	---	---	---	---	---	---	---	---	---	no
Chlorine	**19.08186**	**11.47395**	---	**6.106197**	**6.081195**	---	**6.081195**	**7.966366**	**18.91252**	**0.099659**	**0.236596**	**yes**
Ammonia	---	4172.347	---	---	2211.344	---	2211.344	2896.86	6877.279	36.23972	86.03476	no
Chlorides	---	---	---	---	---	---	---	---	---	---	---	no
Sulfates	---	---	---	---	---	---	---	---	---	---	---	no
TDS	---	---	---	---	---	---	---	---	---	---	---	no
	---	---	---	---	---	---	---	---	---	---	---	no
	---	---	---	---	---	---	---	---	---	---	---	no

APPENDIX I

Numeric Toxic Limits: LDEQ has reviewed and evaluated the effluent analyses submitted by the permittee on **June 21, 2006** , and examined the following pollutants that are regulated by LAC 33:IX.1113.C.6. in accordance with the implementation procedures outlined under the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, August 13, 2007. Please see Appendix B-1, Water Quality Screen Spreadsheet.

Pollutant	Ce [1]	Ce x 2.13 [2]	Water Quality Based Limit [3]	Drinking Water Source	Permit Limit ?
Arsenic	22	46.86	2.42 lbs/day	No	No
Copper	19.9	42.39	0.078 lbs/day	No	Yes
Zinc	23.5	50.06	0.65 lbs/day	No	No
Chloroform	20	42.6	0.91 lbs/day	No	No
Chlorine	20	42.6	0.10 lbs/day	No	Yes

1/ Metals concentration results were presented as total metals in lab analysis submitted by the permittee. All pollutants calculated in µg/l.

2/ For the reported effluent concentrations (Ce) it is estimated that 95% of the concentrations of chemicals taken over time will be 2.13 times the Ce or less.

3/ The water quality based limit is the maximum allowable instream concentration for that pollutant to be in compliance with water quality standards. Louisiana Water Quality Criteria for metals are hardness dependent, and expressed as dissolved metals. The water quality based limit is calculated with a conversion for metals limits expressed as total metals.

The following steps were used in evaluating the potential toxicity of the analyzed pollutants (see Appendix B-1):

i. An evaluation of the applicability of the effluent data.

Results of the PPS were entered and compared to EPA's Minimum Quantification Levels (MQL's) to determine the potential presence of the respective toxic pollutant. Those pollutants with reported laboratory Method Detection Levels (MDL's) which exceed their respective EPA MQL's are determined to be reasonably present in the effluent and an evaluation of their potential toxicity is determined. Those pollutants with MDLs less than the MQL are determined to be not potentially present in the effluent and eliminated from further evaluation.

ii. Calculation of permit limits based on applicable water quality standards.

Applicable water quality criteria are listed in the Appendix B-1 in Columns 12-14. These values were used to calculate the Waste Load Allocations (WLAs) for each of the toxic

pollutants. The WLA is the maximum allowable concentration of a pollutant necessary to meet the respective water quality criteria. The WLAs are calculated as described in the State's Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, dated October 30, 1995, as follows (**Copper** is used as the example pollutant for the following calculations):

Complete Mix Balance Model for Waste Load Allocation

Qe	=	plant effluent, MGD = 1.5
Qr	=	critical flow of receiving stream, 0.1 **cfs**
Fs	=	MZ, ZID flow fraction, LAC 33:IX.1115.D.7 and 8 (**MZ = 1, and ZID = 0.1**)
Cr	=	numerical criteria value from LAC 33:IX.1113, Table 1
Cu	=	ambient instream concentration for pollutant. In the absence of accurate supporting data, assume Cu = 0
WLA	=	concentration for pollutant at end-of-pipe based on aquatic life and human health numerical criteria (site specific dilution type)
LTA	=	long term average, units same as WLA
WQBL	=	effluent water quality based limit.

Dilution factor $= \dfrac{Qe}{(QrFs + Qe)}$

Dilution factor (acute) $= \dfrac{1.5}{(0.1)(0.6463)(0.1) + 1.5}$

$= 0.996$

Dilution factor (chronic) $= \dfrac{1.5}{(0.1)(0.6463)(1.0)+1.5}$

$= 0.959$

WLA = (Cr/Dilution factor) - (FsQrCu/Qe)

iii. Conversion of dissolved metals criteria for aquatic life to total metals.

Metals criteria for aquatic life protection are based on dissolved metals concentrations and hardness values averaged from data compilations contained in the Louisiana Water Quality Data Summary. A dissolved to total metal conversion will be implemented. Hardness and TSS are a function of the conversion. This involves determining a linear partition coefficient for the metal of concern and using this to determine the fraction of metal dissolved, so that the dissolved metal ambient criteria may be translated to a total effluent limit. The average hardness value used for the analysis is 28.25 mg/l CaCO3 (USGS data). The 15th percentile TSS value is 6 mg/l. The formula for converting dissolved metals to total metals for streams and lakes are provided below.

K_p	=	Linear partition coefficient
K_{po}	=	found in Table A below
"	=	found in Table A below
TSS	=	total suspended solids concentration found in receiving stream or approximation thereof (nearest most representative site), lowest 15th percentile, units in mg/l
C_D/C_T	=	Fraction of metal dissolved
Cr	=	Dissolved criteria value for metal in water quality standards

$$K_p = K_{po} \times TSS^{''}$$

$$K_p = (1.04 \times 10^6) \times 6^{(-0.74)}$$

then, $$\frac{C_D}{C_T} = \frac{1}{1 + (K_P)(TSS)(10^{-6})}$$

$$\frac{C_D}{C_T} = \frac{1}{1 + (276{,}185.84)(6)(10^{-6})}$$

$$= 0.38$$

therefore,

$$\text{Total Metal} = \frac{Cr}{(C_D/C_T)}$$

TABLE A

LINEAR PARTITION COEFFICIENTS
FOR PRIORITY METALS IN STREAMS AND LAKES

(Delos et. al, 1984) (*1)

METAL	STREAMS		LAKES	
	K_{po}	"	K_{po}	"
Arsenic	0.48×10^6	-0.73	0.48×10^6	-0.73
Cadmium	4.00×10^6	-1.13	3.52×10^6	-0.92
Chromium III (*2)	3.36×10^6	-0.93	2.17×10^6	-0.27
Copper	1.04×10^6	-0.74	2.85×10^6	-0.9
Lead	2.80×10^6	-0.8	2.04×10^6	-0.53
Mercury	2.90×10^6	-1.14	1.97×10^6	-1.17
Nickel	0.49×10^6	-0.57	2.21×10^6	-0.76
Zinc	1.25×10^6	-0.7	3.34×10^6	-0.68

(*1) Delos, C. G., W. L. Richardson, J. V. DePinto, R. B. Ambrose, P. W. Rogers, K. Rygwelski, J. P. St. John, W. J. Shaughnessey, T. A. Faha, W. N. Christie. Technical Guidance for performing Waste Load Allocations, Book II: Streams and Rivers. Chapter 3: Toxic Substances, for the U. S. Environmental Protection Agency. (EPA-440/4-84-022).

(*2) Linear partition coefficients shall not apply to the Chromium VI numerical criterion. The approved analytical method for Chromium VI measures only the dissolved form. Therefore, permit limits for Chromium VI shall be expressed in the dissolved form. See 40 CFR 122.45(c)(3).

WLA a,c,h = (Cr/Dilution factor) - (FsQrCu/Qe)

WLA_{acute} = (14.87/0.996) - [(0.1)(0.1)(0)/1.5] = 14.93

$WLA_{chronic}$ = (11.06/0.959) - [(1.0)(0.1)(0)/1.5] = 11.53

iv. Calculation of Long Term Averages (LTA's) and Permit Limits.

Comparison of the reported effluent data (converted to the 95th percentile) to the calculated effluent limitations. Long term averages are listed in the Appendix B-1 in Columns 15-17.

Long term averages are calculated for each WLA (based on aquatic and human health criteria). The LTA's are calculated as follows:

$LTA_a = WLA_a \times 0.32$
$LTA_c = WLA_c \times 0.53$
$LTA_h = WLA_h$

LTA_{acute} = 14.93 x 0.32 = 4.78

$LTA_{chronic}$ = 11.53 x 0.53 = 6.11

A comparison of each LTA is made and the lowest (most restrictive) is selected to calculate the effluent limitations. The most limiting LTA is listed in Appendix B-1, Column 18.

Calculation of permit limits if aquatic life LTA is more limiting:

Daily Average = Min(LTA_a, LTA_c) x 1.31
Daily Maximum = Min(LTA_a, LTA_c) x 3.11

Daily Average = 4.78 x 1.31 = 6.26 µg/l
Daily Maximum = 4.78 x 3.11 = 14.87 µg/l

If human health LTA is more limiting:
Daily Average = LTA_h
Daily Maximum = LTA_h x 2.38

The resulting allowable effluent concentration is converted to a mass value using the following formula:

lbs/day = (0.00626 mg/l) x 8.34 x 1.5 MGD

= 0.078 lbs/day

Comparison of the reported effluent data (converted to 95th percentile) is made to the calculated effluent limitations. Water Quality Based limits are listed in Appendix B-1, Columns 19-22.

In accordance with the State of Louisiana's implementation procedures, the reported effluent concentration is compared to the calculated daily average concentration. If the effluent concentration is greater than the calculated daily average concentration, then a reasonable potential exists and an effluent limitation for the pollutant of concern is imposed in the permit. (Please refer to Appendix B-1 for the calculated daily average concentration listed in Column 19 and the effluent concentration listed in Column 3.)

The discharge is considered to pose a reasonable potential to cause a water quality excursion if the estimated 95th percentile of a pollutant in the effluent will result in an instream waste concentration, which is above the applicable State water quality criterion. The 95th percentile of possible effluent concentrations are estimated as follows:

$$C_{95} = C_{mean} * \exp (1.645 * \Phi - 0.5 * \Phi^2)$$

where: 1.645 = normal distribution factor at 95th percentile

$$\Phi^2 = \ln(CV^2 + 1)$$

if CV is assumed = 0.6,
$\Phi^2 = .307$

The ratio of the estimated 95th percentile value to the mean (C_{95}/C_{mean}) is calculated :

$$C_{95}/C_{mean} = 2.13$$

Based upon review of the permittee's effluent data, there is one pollutant(s) present or potentially present in the effluent discharge in such concentrations which would cause an exceedance of Louisiana's Water Quality Standards. This pollutant is identified as copper. A summary of the evaluation of the permittee's effluent analysis of the toxic pollutants is listed in Appendix B-1. As per LAC 33:IX.2709.F.1, all pollutants limited in permits shall have limitations, standards, or prohibitions expressed in terms of mass. Consequently, water quality-based limitations as seen in the permit are expressed in terms of mass.

BIOMONITORING FREQUENCY RECOMMENDATION AND RATIONALE FOR ADDITIONAL REQUIREMENTS

Permit Number: **LA0038822**
Facility Name: **American Water & Wastewater Management, LLC/City of Grambling**
Previous Critical Dilution: **95.75%** Proposed Critical Dilution: **96%**
Date of Review: **03/20/07; updated 3/11/08**
Name of Reviewer: **Laura Thompson**

Recommended Frequency by Species:

***Pimephales promelas* (Fathead minnow): Once / Quarter[1]**
***Ceriodaphnia dubia* (water flea): Once / Quarter[1]**

Recommended Dilution Series: **30%, 40%, 54%, 72%, and 96%**

Number of Tests Performed during previous 5 years by Species:

***Pimephales promelas* (Fathead minnow): 18**
***Daphnia pulex* (water flea): N/A – Testing of species was not required**
***Daphnia magna* (water flea): N/A – Testing of species was not required**
***Ceriodaphnia dubia* (water flea): 19**

Number of Failed Tests during previous 5 years by Species:

***Pimephales promelas* (Fathead minnow): 3 (sub-lethal)**
***Daphnia pulex* (water flea): N/A – Testing of species was not required**
***Daphnia magna* (water flea): N/A – Testing of species was not required**
***Ceriodaphnia dubia* (water flea): 1 (lethal), 5 (sub-lethal)**

Failed Test Dates during previous 5 years by Species:

***Pimephales promelas* (Fathead minnow): Testing periods of 1/01/06-6/30/06 (sub-lethal); 4/1/07-6/30/07 (sub-lethal); 7/1/07-9/30/07 (sub-lethal)**
***Daphnia pulex* (water flea): N/A – Testing of species was not required**
***Daphnia magna* (water flea): N/A – Testing of species was not required**
***Ceriodaphnia dubia* (water flea): Testing periods of 7/01/04-9/30/04 (sub-lethal); 1/01/05-3/31/05 (sub-lethal); 1/01/06-3/31/06 (sub-lethal); 7/01/06-9/30/06 (sub-lethal); 10/1/07-12/31/07 (lethal and sub-lethal)**

[1] LDEQ does not recommend that the option for a frequency reduction be extended for Outfall 001 due to multiple sub-lethal failures to the *Ceriodaphnia dubia* and *Pimephales promelas* This facility shall have an established biomonitoring testing frequency of **once per quarter** for the term of the permit

Previous TRE Activities: **N/A – No previous TRE Activities**

Additional Requirements (including WET Limits) Rationale / Comments Concerning Permitting:

American Water & Wastewater Management, LLC/City of Grambling owns and operates an existing publicly owned treatment works serving the City of Grambling and Grambling State University in Grambling, Lincoln Parish, Louisiana. LPDES Permit LA0038822, effective January 1, 2002, contained chronic freshwater biomonitoring as an effluent characteristic of Outfall 001 for *Pimephales promelas* and *Ceriodaphnia dubia*. The effluent series consisted of 30.30%, 40.39%, 53.86%, 71.81%, and 95.75% concentrations, with 95.75% being defined as the critical dilution. Testing was to be performed quarterly for both *Pimephales promelas* and *Ceriodaphnia dubia*. Data on file indicate that the permittee has complied with the biomonitoring requirements contained in LA0038822 with 3 sub-lethal failures to the *Pimephales promelas* and 1 lethal and 5 sub-lethal failures to the *Ceriodaphnia dubia* in the last five years.

It is recommended that freshwater chronic biomonitoring continue to be an effluent characteristic of Outfall 001 (discharge of 1.5 mgd of treated sanitary wastewater) in LA0038822. The effluent dilution series shall be 30%, 40%, 54%, 72%, and 96% concentrations, with 96% being defined as the critical dilution. Therefore, in accordance with the Environmental Protection Agency (Region 6) WET testing frequency acceleration(s), the biomonitoring frequency shall be once per quarter for *Ceriodaphnia dubia* and *Pimephales promelas* for the term of the permit.

This recommendation is in accordance with the LDEQ/OES Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, EPA Region 6 Post-Third Round Whole Effluent Toxicity Testing Frequencies (Revised June 30, 2000), and the Best Professional Judgement (BPJ) of the reviewer.

PRETREATMENT EVALUATION AND RECOMMENDATION

FACILIITY NAME: *Grambling Regional WWTP*

CITY: *Grambling*

PARISH: *Lincoln*

PERMIT #: *LA0038822*

DESIGN FLOW: *1.5 MGD*

ACTUAL FLOW: *0.6 MGD*

OTHER POTWs IN SYSTEM: *none*

SIGNIFICANT INDUSTRIES LISTED IN MANUFACTURERS GUIDE AND LPDES PERMIT RENEWAL APPLICATION:

Industry Name	Type of Industry	Direct or Indirect Discharger
Grambling State University	University – buildings include: student dormitories, student center, football stadium, arena, administrative buildings, teaching buildings, etc.	Indirect
Industrial Insulation Group	Manufactures high temperature glue, pipe insulation and adhesive products	Direct [1]

STANDARD LANGUAGE RECOMMENDATION AND JUSTIFICATION:

Due to the absence of pretreatment categorical standards for the indirect discharges listed above or the discharge is of sanitary wastewater only, it is recommended that LDEQ Option 1 Pretreatment Language be included in LPDES Permit LA0038822.

This language is established for municipalities that do not have either an approved or required Pretreatment program. This recommendation is in accordance with 40 CFR Part 403 regulations, the General Pretreatment Regulations for Existing and New Sources of Pollution contained in LAC Title 33, Part IX, Chapter 61 and the Best Professional Judgement (BPJ) of the reviewer.

[1] The process wastewater discharges from this facility are authorized under LPDES Permit LA0046281 and stormwater discharges from this facility are regulated via LDEQ Mult-Sector Stormwater Permit LAR05M431.

Melissa Reboul – 3/21/2007

Invoice No._____

LOUISIANA WATER POLLUTION CONTROL FEE SYSTEM
RATING WORKSHEET
PERMIT NO: LA0038822; AI 51970; PER20060001

1 a. Company Name: City of Grambling
b. Facility Name: Grambling Regional Wastewater Treatment Plant

2. Local Mailing Address: P.O. Box 108
Ruston, LA 71273

3. Billing Address (If different):

4. Facility Location: 7706 U.S. Highway 80 West
a. Parish: Lincoln

5. Facility Type: privately owned treatment works
a. Treatment Process Used: activated sludge system using an oxidation ditch process with rotors for the aeration, and a final clarifier. Chlorine is the method of disinfection. Dechlorination is used to redce the chlorine residual. The effluent then passes through a post aeration process prior to discharge.

6. Products Produced:
a. Raw materials stored or used:
b. By-products produced:

7. Primary SIC Code: 4952
a. Other SIC Codes:

8. Fac. Manager: Mr. Marios Papadopoulos
a. Telephone: (318) 247-0230

9. Owner:
a. Telephone:

10. Env. Contact:
a. Telephone:

11. State Permit No.:	12. NPDES Permit No.
a. Date Issued:	a. Effective Date:
b. New: Modified:	b. Expiration Date:

13. Number and Identification of Outfalls: One, 001

14. Number of Injection Wells:

15. Water Source(s):

16. Receiving Water(s): Redwine Creek, thence into the Dugdemona River, thence into Big Creek

Is receiving water:
a. Public Water Supply Yes ( ) No (x)
b. Designated Water Quality Limited Yes (x) No ( )
c. In Compliance with Water Quality Standards Yes (x) No ( )

17. River Basin: Ouachita River 18. Basin Segment No. 081401

Federal Tax I. D. No.: 72-1433858

Initials of Rater: ro

TOTAL RATING POINTS ASSIGNED 38

Invoice No._____

ANNUAL FEE RATING WORKSHEET
PERMIT NO: LA0038822; AI 51970; PER20060001

1. FACILITY COMPLEXITY DESIGNATION

Primary SIC 4952

Complexity Designation =

X	I	(0 points)
	II	(10 points)
	III	(20 points)
	IV	(30 points)
	V	(40 points)
	VI	(50 points)

COMPLEXITY DESIGNATION POINTS 0

2. FLOW VOLUME AND TYPE

A. Wastewater Type I

Is total Daily Average Discharge greater than 60 mgd?

_____Yes, then points = 200

_____No, then

Points = 0.5 X Total Daily Average Discharge (mgd)

Points = 0.5 X _____ =

Total points =

B. Wastewater Type II

Is total Daily Average Discharge greater than 5 mgd?

_____Yes, then points= 50

___ No, then

Points = 10 X Total Daily Average Discharge (mgd)

Points = 10 X _____ =

Total points =

C. Wastewater Type III

Is total Daily Average Discharge greater than 25 mgd?

_____Yes, then points= 50

__X__ No, then

Points = 2 X Total Daily Average Discharge (mgd)

Points = 2 X ___1.5___ =

Total points = ___3___

FLOW VOLUME AND TYPE POINTS 3

3. POLLUTANTS

A. BOD_5 or $CBOD_5$

Daily Average Load =

8.34 lb/gal x 1.5 MGD x 10 mg/l = 125 lb/day

_____	50 lb/day	(0 points)
x	> 50 - 500	(5 points)
_____	> 500 - 1000	(10 points)
_____	> 1000 - 3000	(20 points)
_____	> 3000 - 5000	(30 points)
_____	> 5000 lb/day	(40 points)

COD or

Daily Average Load =

_____	100 lb/day	(0 points)
_____	> 100 - 500	(5 points)
_____	> 500 - 1000	(10 points)
_____	> 1000 - 5000	(20 points)
_____	> 5000 - 10000	(30 points)
_____	> 10000 lb/day	(40 points)

BOD OR COD DEMAND POINTS 5

(whichever is greater)

Invoice No._____

ANNUAL FEE RATING WORKSHEET
PERMIT NO: LA0038822; AI 51970; PER20060001

B. TSS
Daily Average Load =

8.34 lb/gal x 1.5 MGD x 15 mg/l = 188 lb/day

_____	≤ 100 lb/day	(0 points)
___x___	> 100 - 500	(5 points)
_____	> 500 - 1000	(10 points)
_____	> 1000 - 5000	(20 points)
_____	> 5000 - 10000	(30 points)
_____	> 10000 lb/day	(40 points)

TSS POINTS __5__

C. AMMONIA
Daily Average Load =

___x___	≤ 200 lb/day	(0 points)
_____	> 200 - 500	(5 points)
_____	> 500 - 1000	(10 points)
_____	> 1000 - 5000	(20 points)
_____	> 5000 - 10000	(30 points)
_____	> 10,000 lb/day	(40 points)

AMMONIA POINTS __0__

TOTAL POLLUTANT POINTS __10__

4. TEMPERATURE (HEAT LOAD)
Heat Load = Average Summer flow (mgd) X ΔT X 0.00834
where ΔT = Permit Limit (Max. Temp.) -70°
Heat Load = _____(mgd) X _____ X 0.00834 = _____Billion BTU
Heat Load =

_____	≤ 4 billion BTU	(0 points)
_____	> 4-20 billion BTU	(5 points)
_____	> 20-100 billion BTU	(10 points)
_____	> 100-200 billion BTU	(15 points)
_____	> 200 billion BTU	(20 points)

HEAT LOAD POINTS __N/A__

5. POTENTIAL PUBLIC HEALTH IMPACTS
Is the receiving water to which the wastewater is discharged or a water body to which it is a tributary used as a drinking water supply source within 50 miles downstream?
___x___No (0 points)
_____Yes, then . . . Complexity Designation

_____	I, II	(0 points)
_____	III	(5 points)
_____	IV	(10 points)
_____	V	(20 points)
_____	VI	(30 points)

POTENTIAL PUBLIC HEALTH IMPACT POINTS __0__

6. MAJOR/MINOR FACILITY DESIGNATION
Has your facility been designated a Major Facility by the administrative authority?
___x___Yes, then Points = __25__
_____No, then

Were effluent limitations assigned to the discharge based on water quality factors in the receiving stream?
_____No, then Points = __0__
_____Yes, then Points = __5__

TOTAL MAJOR/MINOR POINTS__25__

TOTAL RATING POINTS ASSIGNED__38__

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OFFICIAL USE

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City of Grambling
Grambling Regional Wastewater Treatment Plant
P.O. Box 108
Grambling, LA 71245

Sent To

Street, Apt. No.;
or PO Box No.

City, State, ZIP+4

PS Form 3800, August 2006 See Reverse for Instructions